The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 835.---Vol. XXI.] LONDON, SATURDAY, AUGUST 23, 1851. [Price 6d.

PURSUANT to a DECREE of the HIGH COURT of CHANCERY, made in a cause of BIRCH *v.* PRICE, with the approbation of Sir William Horne, one of the Masters of the said court, by Mr. JOHNSON, on Friday, the 24th day of October next, at Three o'clock in the afternoon, at the Wynnstay Arms Hotel, in WREXHAM, in the county of DENBIGH, in one lot, the FREEHOLD ESTATE, consisting of PLAS MOSTYN FARM, COLLIERIES, and MINERALS of COAL and IRONSTONE, situate in the said parish of Wrexham. 1

Particulars may be had gratis, in London, at the said Master's Chambers, Southampton-buildings, Chancery-lane; Mr. N. C. Milne, solicitor, Harcourt-buildings, Temple; of Messrs. Hughes, Fairfoot, and Webb, solicitors, Clement's Inn; and in the country, of Mr. Jones, solicitor, Brynhyfryd, Ruthin; and Mr. Robert Humphreys Jones, solicitor, Wrexham; at the place of sale; and the principal inns in Ruabon, Liverpool, Manchester, Chester, Shrewsbury, Wolverhampton, and Birmingham.

VIADUCT FOUNDRY, NEWTON, NEAR WARRINGTON, TO BE SOLD BY PRIVATE CONTRACT.—TO RAILWAY COMPANIES, ENGINEERS, MACHINE MAKERS, COTTON SPINNERS, AND MANUFACTURERS.—In consequence of the dissolution of partnership of Messrs. Jones and Potts, engineers and ironfounders, of the above foundry, the WHOLE of that large and well-known ESTABLISHMENT will BE DISPOSED OF, either in one lot, or the Building, Gas-Works, and Cottages will be sold separately. These buildings, with very little alteration, can be made available for many branches of manufacture. The above works are situated on the Liverpool and Manchester Railway, near the Warrington Junction Station. They are 13¼ miles from Liverpool, 16¼ from Manchester, 5 from Warrington, and 4 from St. Helen's. The Sankey Canal also runs within a quarter of a mile of the works. The buildings, gas-works, and cottages occupy five acres two roods fourteen poles, statute measure, which is subject to a chief rent £91 5s. 3d. per annum, with three leases of 999 years each, bearing dates March 25th, 1839, January 25th, 1847, and December 26th, 1849. There are 77 cottages, the annual rental of which is £530. There are two communications from the London and North-Western Railway into the centre of the works, with a siding along the main line of about 300 yards.—N.B. The machinery, which may be purchased with the land and buildings, or it will be sold in separate items to suit purchasers, consists of 38 lathes, two double wheel lathes, 35 planing machines, 14 drilling machines, eight slotting machines, three screwing machines, and four punching and cutting presses, one 30-cwts. steam hammer, Nasmyth's patent, one rivetting machine, which cuts and makes its own rivets, and will rivet a boiler 30 feet long, one large plate bending machine, with rolls 6 feet 6 inches long and 12 inches diameter, one hydraulic press, and various other machines, tools, shafting and gearing for working the above machinery, the whole of which are in first-rate working condition, one 20-horse high-pressure engine, and one 14-horse condensing engine, with boilers complete, one new locomotive engine, with 15½-inch cylinder, 20-inch stroke, driving wheels 6 feet 6 inches diameter, one new six-horse horizontal engine, with boiler complete. The smiths' shops contain 40 hearths, with anvils and cranes, and every convenience for both light and heavy work. The fitting, turning, and erecting shops, are capable of holding upwards of 700 hands. 2

The whole may be seen, and further information obtained on application at the office of the above works, between the hours of nine in the morning and five in the afternoon.

Plans of the works and cottages may be seen, and catalogues of the machinery (which is now being offered by private sale in large or small lots, as parties may require) had at the offices of the following newspapers:—The *Midland Counties* office, Birmingham; *Mining Journal*, in London; *Leeds Mercury*; and at the offices of Mr. Kirk, auctioneer and valuer, 24, Princess-street, Manchester, who is appointed agent for Messrs. Jones and Potts, the owners.

TO ENGINEERS, MINE PROPRIETORS, AND OTHERS.

ROCKS AND TREVERBYN UNITED TIN MINES, ST. AUSTELL, CORNWALL. 3

TO BE DISPOSED OF, BY PRIVATE CONTRACT, an excellent 70-inch cylinder STEAM-ENGINE, 10-feet stroke in cylinder, 7 ft. 9 in. in the shaft, with 22 tons of new boilers, furniture, steam-chest and attachments, all complete; new false cover, valve, nozzle, and hand gear, cast posts and wood work, including first piece of rod, quite new; the condensing work perfect in all respects, and the engine throughout fit for any service, having cost £800 in repairs within the last 12 months, since which the engine has never worked.

The whole may be seen, and further information obtained, on application to Mr. Gray, or the other agents on the mines.

VALUABLE SHARES.

TO BE SOLD, a few SHARES in the TYN-Y-CEUNANT SLATE AND SLAB QUARRIES, situated in the parish of TAL-Y-LYN, Merionethshire, NORTH WALES.—These Quarries are now in full work; and according to the surveyor's (Mr. St. Pierre Foley) report, will return 100 per cent., and who further remarks, in his printed report, dated May 8th, 1850, at page 9, in comparing the Tyn-y-Ceunant to the adjoining quarries, Braich Goch—"Mr. Rowland's quarries, set down at £25,000, &c., almost worked out, and by no means equal in FULNESS, or facility of working, to Tyn-y-Ceunant, which pays NO ROYALTY whatever," &c. These observations may convey some idea of the value of these quarries over others in the same district. For further particulars, apply by letter, to "A. Z.," 457, West Strand, London. 4

VALUABLE COLLIERY at CWM AMMON, CARMARTHENSHIRE, a short distance from the Port of Llanelly, and adjoining the Llanelly Railway.

TO BE SOLD, the LEASE of that highly-improvable PROPERTY, known as the LION COLLIERY, consisting of ONE SEAM of COAL, called the Tregolian, and of a SERIES of COAL VEINS, of which the ANTHRACITE district is composed, and covers about 320 acres, of which 14 acres only have been worked during the last six years; it is so situate that two other properties may be worked by the present level. It is estimated that at least 100 tons per day may be obtained from the colliery, at a very moderate cost; and it is calculated that, by making a small outlay, a nett income of at least £4500 per annum may be realised.

For particulars apply to Messrs. Toplis and Son, 16, St. Paul's Churchyard, London. 5

CHESHIRE COLLIERY.

TO BE LET, ON LEASE, the PARKGATE COLLIERY, near PARKGATE, in the county of CHESTER.—This is situate on the Parkgate Coal-Field, about four miles from the Chester and Birkenhead Railway, and consists of about SEVEN HUNDRED ACRES of LAND, having on the frontage towards the seashore FIVE WORKABLE BEDS OF COAL, which have been proved on the rise and on the dip of the ground, and it is supposed that other beds exist lower down. It is close to the boundary of the Denst Collieries, which are now in full operation, and the veins and quality of the coals (well-known to be very superior for domestic and lime-burning purposes) are the same in both.

A shipping place might be erected close to the works.—A moderate reserved rent, merging in the royalty, will be required.

Mr. John Davies, coal and mine agent, Mostyn Quay, will give any further information required; and Mr. David Williams, of Bron Eryvi, near Carnarvon, will treat with any party desirous of taking a lease. 6

WALL'S-END COLLIERY.—TO BE LET, and entered upon on or after the 28th day of September next, for such a term of years as may be agreed upon, all that CURRENT-GOING COLLIERY, well-known by the name of WALL'S-END COLLIERY, at present held by Messrs. Archbold and partners, under lease from the Dean and Chapter of Durham, comprising the COAL MINES under the whole of the lands belonging to the said Dean and Chapter, in the township of WALL'S-END, in the county of NORTHUMBERLAND. 7

The Low Main Seam, which has been sunk to at a depth of 22 fathoms below the Bensham Seam, and the Beaumont Seam, which has been bored to at a further depth of 23 fathoms, remain untouched throughout the Royalty. The Low Main Seam, in the royalty next adjoining, is of good quality, and is worked for gas purposes.

The Bensham Seam supplies the vend of the existing colliery. The colliery is contiguous to, and has shipping berths on, the River Tyne.

Plans of the workings of the colliery, and further particulars, may be known on application to Mr. E. F. Boyd, Urpeth Colliery, near Chester-le-street; or at the offices of the Registrar of the Dean and Chapter of Durham, 28, South Bailey, Durham.

Durham, July 2, 1851.

TO IRONMASTERS, RAILWAY DIRECTORS, ENGINEERS, and FOUNDERS.—The SUBSCRIBER having been appointed SOLE AGENT in LONDON for the SALE of Mr. MORRIES STIRLING'S PATENT IRON, begs to intimate that he is prepared to SUPPLY Railway Companies, Engineers, and Founders, with the PATENT MALLEABLE and TOUGHENED CAST-IRON, and that all orders addressed to him for these, and also for RAILS, with Hardened Surfaces, shall have his prompt attention.

Specimens of the different Irons shown, and every information afforded, on application. Information as to the terms of License under Mr. Stirling's Patents will be given by the Subscriber, and also by Mr. JEE, C.E., 6, John-street, Adelphi. A. MACNAUGHT.

OFFICES,—2, Queen-street-place, Upper Thames-street.
WAREHOUSES,—Paul's Wharf, 25, Upper Thames-street.
August 2, 1851. 8

TO AGRICULTURISTS.—IMPROVEMENTS IN THE PREPARATION OF MANURES.—AGRICULTURISTS are INVITED to take SAMPLES of MANURES (Stones's Patent Huminate), free of expense, at the office of the GENERAL PEAT WORKING AND MANURE COMPANY, 6, JOHN-STREET, ADELPHI, LONDON.—The Patent Huminate is free from filthy matter; it consists entirely of concentrated decomposed vegetable organic substances, soluble humic acid, fixed salts of ammonia, with other ingredients, according with soil, plant, and climate. It will promote vegetation in all its requirements, and invariably improve the soil, and can challenge the best guano, at one-third the cost.

To every scientific person, or practical farmer (however deficient in knowledge of chemical science), who inquires into the composition of these manures, the folly of bringing guanos to England, even though they cost but one quarter the price now paid for them, will appear most undeniably.

Samples may be had on application at the *Mining Journal* office, 26, Fleet-street. 9

MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, renews his OFFERS of SERVICE to CAPITALISTS seeking the means of SECURE INVESTMENTS, which can be made to yield an annual income of 15 to 20 per cent. 10

MR. CROFTS HAS SPECIALLY FOR SALE—Great Sheba Consols, Lamheroos, Wheal Vincent, Wheal Benny, Appledore, Devon Consols North, West Polgooth, Duke of Cornwall, Bodmin Consols, Wheal Tremar, Allt-y-Crib, Warleggan, Bedford United, South Tamar, East Tamar, East Gunnis Lake, Bronfloyd, Llwynmalees, Trethevy, Wheal Zion, West Callington, Tincroft, West Tolgus, Rocks and Treverbyn, Lydford Consols, Wheal Williams, Victoria, Herodsfoot, Bodmin Moor Consols, Okel Tor, and all dividend mines.

CAPITALISTS are reminded that the present re-action in Mining Shares, associated as it is with the abundance of money, can be but of short duration; and purchases, therefore, should not be delayed in the expectation of a further reduction in the value of shares, which is not likely to take place. The operations of the day are chiefly in mines of GOOD REPUTE, and UNDER REPUTABLE MANAGEMENT, in which splendid investments may now be made, as well as in DIVIDEND MINES.

Mr. CROFTS will be happy to give the best advice his experience enables him for the guidance of his friends, and transacts business only for principals.

No. 4, King-street, Cheapside, August 23, 1851.

GENERAL MINING OFFICES.
23, *Threadneedle-street, London.* 11

MR. JOSEPH JAMES REYNOLDS, late of CAMBORNE, CORNWALL, begs to inform his friends and the public that he has COMMENCED BUSINESS as a MINING and GENERAL AGENT at the above office, and trusts, by paying a due regard to the welfare of his clients, that he will at all times merit their confidence. Having been connected with the management of mines in the most productive districts of Cornwall upwards of twenty years, and being in communication with some of the most respectable agents in the mining districts, Mr. Reynolds will be enabled at all times to furnish such information as may be relied on.

J. J. REYNOLDS will carry on business upon COMMISSION ONLY, making no intermediate price between buyers and sellers, and will be ready at all times to introduce the buyer and seller of any shares to each other.—Office hours Ten to Four.

MESSRS. FRANCIS & CO., in order to avoid the complicated and indefinite system of CALLS for working or proving mines, consider that a better and more satisfactory [illegible] be found in offering the public those chiefly in which the machinery [illegible] round work required to bring them into a state of profit has been complet[illegible] 12

In mines thus [illegible] it will be obvious that as there will be no risk, so there can be no neces[illegible] calls—the speculative part of the adventure having been gone through; and in this way capitalists will be enabled to invest with the certainty of immediate returns.

Mr. MATTHEW FRANCIS takes leave to announce, that he has several THOUSANDS of POUNDS WORTH of SHARES to DISPOSE OF, which, at the selling price, give a profit of from £20 to £40 per cent.

*** Offices, No. 7, John-street, Adelphi, London.

MR. JOHN PHILLIPS, MINERAL SURVEYOR AND MINE MANAGER, MARGARET-STREET, NORTH ADELAIDE, in the province of SOUTH AUSTRALIA, after three years' residence and two years' exploration in the colony, RESERVES his EXPERIENCE for BRITISH CAPITAL: awaiting the result of this advertisement in a suitable remuneration for past time and future services. 13

MR. RICHARD GREENWOOD begs leave most respectfully to acquaint his Friends and the Public generally that he has COMMENCED the BUSINESS of an AUCTIONEER, APPRAISER, MINE SHAREBROKER, and general COMMISSION AGENT.—Mr. R. GREENWOOD having for many years been engaged in the Mining and Commercial business of this county, and being fully aware of the desirableness of strict confidence in those who arrange such transactions, does not hesitate to pledge himself to the conducting of whatever business may be committed to his care, with the strictest attention to the interests of his clients. 14

Parties entrusting property to Mr. Greenwood can be accommodated with an advance of money in anticipation of a sale.

OFFICES—PYDAR-STREET, TRURO.
Dated August 15, 1851.

MINING OFFICES, REDRUTH.—JOHN ROBERT PIKE, GENERAL SHAREBROKER (on Commission only), being resident in the centre of the Mining district, POSSESSES great FACILITIES in the DISPOSAL OF or PURCHASING SHARES, INSPECTING MINES, &c., on the most moderate and honourable terms. 15

MINING SHARES.—Mr. HENRY VATCHER, EXETER, OFFERS his ADVICE and ASSISTANCE to PARTIES willing to INVEST in the ABOVE SECURITIES. Ten years' residence in Exeter, together with periodical visits to nearly all the Mines in Devon and Cornwall, enables him to become thoroughly acquainted with their respective merits.—Mr. VATCHER has at his command, at all times, practical and experienced agents, so that if any inspection is required, the same can be done without delay. 16

MINING AND RAILWAY OFFICES, No. 3, CASTLE-TERRACE, EXETER.—Mr. JOHN JURY, RAILWAY and MINING SHAREBROKER, OFFERS his SERVICES to CAPITALISTS in the PURCHASE or SALE of ANY DESCRIPTION OF PROPERTY; and will be happy to point out a selection of such stock as appear the most eligible, from data that can only be arrived at by those who give an undivided attention to the subject.—Every information afforded (either in person or by letter) to capitalists wishing to invest or exchange their securities, and sales or purchases effected upon the best terms, and at one-half the commission usually charged. 17

MR. JOHN DAVIES, MINING SHAREBROKER, *No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.* 18

MR. ALFRED SENIOR MERRY, DEALER IN COBALT AND NICKEL ORES, AND ASSAYER IN GENERAL.—Address: *LEE-CRESCENT, BIRMINGHAM.* 19

MR. THOMAS JORDAN, METAL BROKER, No. 75, OLD BROAD-STREET, CITY, exclusive AGENT for one of the BEST MAKERS of HAMMERED IRON, for MARINE, LOCOMOTIVE, and other ENGINES. Also AGENT for the SALE of SOUTH STAFFORDSHIRE and WELSH BAR, BOLT and BOILER PLATE IRON, in all its varieties. 20

The Proprietors of Lead and Copper Mines in Devon, Cornwall, Wales, &c., will find great advantage in the quality and cheapness of the Iron they require, by seeking quotations through the Advertiser.

MESSRS. TREVARTON AND CO., MINING SHARE DEALERS AND BROKERS,
5, *ST. JAMES'S-STREET, PALL-MALL, LONDON.* 21

MINING, AUCTION, AND GENERAL AGENCY OFFICE, No. 3, GEORGE-YARD, LOMBARD-STREET, LONDON. 22

Messrs. TREDINNICK & CO. beg to inform their Friends and the Public that they continue to TRANSACT EVERY DESCRIPTION of MINING AGENCY BUSINESS, and have ON SALE SHARES in most of the DIVIDEND MINES in CORNWALL, DEVON, and WALES, as well as those on the eve of paying, and situate in the best mining districts.—Loans and Money Matters in general negociated; Mines Inspected, and Reports obtained from practical agents, and every information affecting the market value of mining property afforded gratuitously.

MOLYNEUX & CO., MINE AGENTS, No. 34, THREADNEEDLE-STREET, have SHARES ON SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to CAPITALISTS the safest and most unexceptionable investment. 23

*** Offices of the Wheal Langford and Baring United Mining Company, and Trebell Consols Mining Company, No. 34, Threadneedle-street.

MINING OFFICES,—ST. MICHAEL'S CHAMBERS, ST. MICHAEL'S-ALLEY, CORNHILL.—Mr. R. TRIPP has for *bonâ fide* SALE shares in the following DIVIDEND-PAYING MINES:— 24

Wheal Buller	Treviskey and Barrier	North Pool
Wheal Basset	South Caradon	East Pool
Wheal Reeth	West Caradon	Alfred Consols
Devon Great Consols	Bedford United	Wheal Tremayne

Also in the following, having present and prospective advantages—viz.:

Wheal Arthur	Wheal Crebor	Trebell Consols
Wheal Langford	Wheal Lion	Gustavus
Wheal Hennock	Wheal Carpenter	West Wheal Alfred

REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURRANT & CO., MINING SHAREBROKERS, 58, LOMBARD-STREET, LONDON, Beg to draw the attention of Capitalists to their REGISTRY for the SALE and PURCHASE of SHARES.

SHARES FOR DISPOSAL. 25

Devon Great Consols	Wheal Mary Ann	South Caradon
Carn Brea	Wellingtons	Great Wheal Sheba
West Caradon	West Buller	Treviskey
Trelawny	Tolgus	Bedford United

N.B.—Statistical information furnished on British and Foreign Mines.—NO CHARGE made for the registration of shares unless business be transacted.

MINING EXCHANGE.—At a GENERAL MEETING of the shareholders of the MINING EXCHANGE, held at the Jamaica Coffee-house, Cornhill, on the 29th July, it was resolved,—

That the Committee do conclude the proposed arrangements for holding the Exchange in the Hall of Commerce, Threadneedle-street. 26

That for the present it is not advisable to alter the terms of admission, except to admit of half-yearly subscribers, at the rate of £3 3s. per annum.

THE MEMBERS COMMENCED BUSINESS IN THE HALL OF COMMERCE ON MONDAY, the 4th of August.

JAMES STRIDE, Secretary.

MINING PROPERTY.—Mr. HERRON has SHARES in the best DIVIDEND-PAYING MINES FOR SALE, and which will give the purchaser 15 to 20 per cent. for the outlay. Amongst others are the following:— 27

Wheal Tremayne	Alfred Consols	Bedford United
Wheal Reeth	Treviskey and Barrier	West Caradon
Wheal Margaret	Carn Brea	South Caradon
Levant	East Wheal Rose	Wheal Trelawny
Botallack	Wheal Seton	Mary Ann
Bryntail	South Tolgus	Cobre

And has also FOR SALE SHARES in MINES having a PROMISING APPEARANCE, and affording greater range for speculation, such as—

East Buller	West Treasury	Tamar Consols
East Basset	North Fowey Consols	Tin Smelting Co.
Cook's Kitchen	West Alfred Consols	South Tamar
St. Aubyn and Grylls	North Downs	Kilbricken

Mining Offices, 33, Clement's-lane, Lombard-street.

REMOVAL—104, *Bishopsgate-street-within.*

MR. PEET, MINING AGENT AND GENERAL SHARE BROKER, has REMOVED to the ABOVE CONVENIENT OFFICES. The same attention paid as hitherto to all MINING BUSINESS of legitimate character; and in thanking his friends for former commissions, he solicits a continuance of their kind support.—OFFICES of Wheal May, Pentire Glaze and Pentire United Mines, Devon Consols West, and Wheal Hamlyn.—The strictest confidence observed in transactions, and the registry of shares will be free, unless a sale or purchase takes 28

MINING OFFICES, No. 51, THREADNEEDLE-STREET, LONDON.—T. FULLER & CO. beg to call the attention of CAPITALISTS to the favourable time of PURCHASING DIVIDEND and OTHER STOCK, which will pay from 15 to 25 per cent. upon present purchase, and will take pleasure in furnishing all particulars, either personally or by letter; and has specially FOR SALE Bedford United, Devon Great Consols, East Russell, Great Wheal Friendship, Trelawny, Venton, Wheal Caradon, Wheal Catherine, Wheal Edward, Wheal France, Wheal William, Wheal Zion, Wheal Mary Ann, and West Caradon.—Office hours from Ten till Four. 29

PARTNER WANTED.—WANTED, in an extensive Iron [illegible] in the neighbourhood of Glasgow, a PARTNER, who can advance from £4000 to £5000, and assist in the management of the concern. The works being in good order, and the connections of the firm extensive, this opening affords a desirable opportunity to any one possessed of the necessary capital of entering into a safe and lucrative business.—Apply to White and Gairdner, accountants, 20, Buchanan-street, Glasgow. 30

TO ENGINEERS.—WANTED, a PERSON who is well-acquainted with the BUSINESS of an ENGINE FITTER, and can undertake the SUPERINTENDENCE of ERECTING both LAND and MARINE ENGINES.—The principal part of his employment would be in the erection of machinery, but when not so required, he would have to work in the manufactory. Persons offering themselves for the situation, which will be a permanent one, are desired to send testimonials from their last employers, at the same time to state their terms.—Address (post-paid) to "N. P.," Post-office, Plymouth.—No application but what contains full name and address will be replied to. 31

WANTED TO PURCHASE (to be delivered at Douglas, Isle of Man, within two months), a NEW or good SECOND-HAND CONDENSING ENGINE, of 22 to 24-inch cylinder, with or without a boiler.—Any party having the like to dispose of, will be pleased to transmit particulars to Mr. William Beckwith, Foxdale Mines, Isle of Man.—August 14, 1851. 32

FOR SALE, A STEAM-ENGINE, nearly NEW, 30-inch cylinder, with working gear complete, for Pumping and Stamping. May be seen at work at the Runnaford Coombe Mine, Buckfastleigh, Devon.—Tenders for the purchase to be sent to Mr. William Miller, 10, Gray's Inn-place, London. 33

FOR SALE, BY PRIVATE CONTRACT, at Messrs. Harvey and Co.'s Foundry, HAYLE, CORNWALL, TWO CAST-IRON STAMPS' AXLES, for 12 heads each, with bearing blocks, brasses, &c., complete, and all new.

Apply to Messrs. Harvey and Co.; or to Mr. Jenkin, Trewargie, Redruth. Hayle Foundry, August 4, 1851. 34

PENVIVIAN COPPER MINE, LANIVET, near BODMIN, CORNWALL.—The OFFICES of this COMPANY are at Mr. MAT. FRANCIS'S, No. 7, JOHN-STREET, ADELPHI, LONDON, where every information may be obtained. 35

WICKLOW COPPER MINE COMPANY.—The DIVIDEND for the past half-year of EIGHTEEN SHILLINGS per share, being at the rate of £36 per cent. per annum, will be PAID on and after the 1st September, at the office of the Company, 10, Leinster Chambers, 43, Dame-street; and in London at the banking-house of Messrs. Puget and Co.—Dublin, August 20, 1851. 36

KENMARE AND WEST OF IRELAND COPPER AND SILVER-LEAD MINING COMPANY.—At the Half-yearly Meeting of the shareholders, held this day, at the offices of the Company,

GEORGE THOMAS BRAINE, Esq., in the chair. 37

The reports and accounts having been read, it was—

Resolved,—That the reports and accounts now read be received and adopted.—Carried unanimously.

Resolved,—That the thanks of the meeting are hereby tendered to the Chairman and Directors, for their past attention to the interest of the Company.—Carried unanimously.

Moorgate-street, London, August 20, 1851.

KINZIGTHAL MINING ASSOCIATION, No. 1, Adelaide-place, August 10, 1851.—Notice is hereby given, that all SHARES in this Association upon which the CALL of Ten Shillings, or 6 florins, per share, due 23d June, shall NOT BE PAID on or before the 23d August, will, in accordance with the statutes, become ABSOLUTELY FORFEITED.

By order of the board,
GEORGE COPELAND CAPPER, Secretary. 38

WHEAL TREASURY,—Granted at 1-24th dues, or royalty. Divided into 1000 shares, of £10 each—to be paid by instalments as may be required.—Now and for upwards of 18 months past working on the Cost-book Principle. The ores now raising will more than pay the current cost. A steam-engine and other necessary machinery are indispensible for the further development of the mine. 39

Specimens of the mine, and prospectuses, may be seen and obtained at Mr. Fenton's office, 5, White Hart-court, Lombard-street, London; or prospectuses may be obtained of John Roscorla, Esq., the purser, Penzance, Cornwall; also of Mr. J. Jones, mine broker, Butler's Head Tavern, Great Bell-alley, Moorgate-street, City.

LIVERPOOL COLLEGE OF CHEMISTRY.
Professor—Dr. SHERIDAN MUSPRATT.
STUDENTS are INSTRUCTED in EVERY BRANCH of the SCIENCE. 40
Fees for Analysis or Assays may be had on application, with full prospectuses.

STIRLING'S PATENTS FOR IMPROVEMENTS IN IRON.—1. TOUGHENED CAST-IRON, which is double the strength of ordinary cast-iron, and only 10s. to 12s. per ton extra.

2. ANTI-LAMINATING IRON, for RAILS and TIRES, &c., at an extra price of from 7s. 6d. to 10s. per ton. Also IMPROVEMENTS in the MAKING of WROUGHT-IRON—saving one process to the manufacturer.

The following Iron Manufacturers are duly LICENSED to MAKE the IRON:— 41

Messrs. BAIRDS'	Gartsherrie, Glasgow.
The CLYDE IRON COMPANY	ditto ditto
The FIRTH IRON COMPANY	ditto ditto
The HERSLEY COMPANY	Tipton, Staffordshire.
Messrs. LLOYDS, FOSTER, & CO.	Wednesbury.
Mr. JOHN WILSON	Dundyvan, Glasgow.

AGENTS.

Messrs. W. & J. H. JOHNSON, 166, Buchanan-street, Glasgow, and 20, St. Andrew's-square, Edinburgh.

Further particulars may be obtained on application to the agents; or to Mr. JEE, civil engineer, No. 6, John-street, Adelphi, London.

A PRACTICAL TREATISE ON MINING.

Just published, in 1 vol., royal 8vo., by John Weale, 59, High Holborn, price 12s. 6d.

A PRACTICAL TREATISE ON THE WORKING AND VENTILATION OF COAL MINES—illustrated with 16 large-sized plans. 42

By JOHN HEDLEY, Colliery Viewer and Mining Agent, Wigan, Lancashire.

This work contains advice to underground managers on their duties, and suggestions for improvements in several neglected points of practical detail, with much other useful information on the management of mines.

Original Correspondence.

THE GERMAN SCHOOL OF GEOLOGY.—No. I.

BY DAVID MUSHET, ESQ.

SIR,—I little expected when I addressed you, a week since, on the tendency of the human mind to apply the petty nostrums and processes of its accidental experience to help out the comprehensive scheme of creation, that I should so soon meet with the apposite commentary of M. W. L. Faber. It appears, by these vapours of science, that the Creator has been furnished with a further auxiliary in the processes which have been devised within the last 50 years for the smelting of zinc ores. How extraordinary, yet how true, to all we know of human nature is this ridiculous suggestion!—it appears, in fact, that it is not *geology* which we are to study, but *smelting*; and that what we really have to wait for to resolve all difficulties as to the producing of ores, is the invention of new methods for reducing them; such operations to be then applied at the dictum or caprice of M. Leopold Von Buch, or M. Elie de Beaumont, or whoever else at that time may be the reigning authority, to the particular difficulties or circumstances which said authority may be acute enough, or fanciful enough, to discern in the subject; for, according to M. Faber, it is authority that is to settle the question, that nothing may be advanced to "shock scientific ears." We know how these ears were shocked by Harvey's "Will-o'-the-wisp" notions of the circulation of the blood. *Purger et saigner, saigner et purger selon les regles*, was "the theoretical and practical study" of one age. The heresies of Galileo were equally shocking to authoritative ears. It is quite true that science has discovered that the real position of many facts is contrary to ordinary notions and common perceptions; but the converse by no means follows, that every thing that contradicts them deserves to be called science. Merely to call black white, and white black, does not constitute a philosopher. In every subject of contemplation, from religion downwards, men call their systems *truth*. The more pains they have taken to depart from truth, and complicate them into artifice, the more highly do they value them. They prize their worthlessness as their work, and plead, like M. Faber, their *study* of these systems as an imperious argument for blind silence and submission to their decrees. They have spoiled their perceptions by contracted labours, and are angry with those who have not acquired the same prejudice of mind. Brindley was probably in earnest when he asserted rivers were made to feed navigable canals. The ears of the shoemaker who creates your corns, and crucifies them by his absurd artifices, is shocked at your complaints, and pleads his long "theoretical and practical study" of the human foot as omnipotent against fact and pain. The tanner held that there was nothing like leather; and were Mr. Belshaw to be consulted on the physiology of the elephant, he would, no doubt, after he had made a few more of them, be shocked at a denial that they were not all made of wicker-work. It is on the same principle that the managers of metal works convert the whole globe into a smelting-furnace, having an absolute vitreous humour in their eye.

Chemistry, it appears, teaches the very beginner to prove that felspar and mica will only crystallise when "cooling off" from the fluid to the solid state. I have known beginners in logic able to *prove* very extraordinary things; but, as I very much prefer *fact* to *proof*, will M. Faber state if he has ever produced a mass of micaceous or felspathic granite by "cooling off?" I am not particular as to quantity, whether it be a cube inch or a cube yard. If a specimen of this can be exhibited, capable of deceiving the eye of any person acquainted with products of fusion, or even a common quarryman, into the belief that it is a piece of natural rock, *one fact* will then have been gained in support of the igneous formation of granite; and it will be the only fact that I have as yet seen advanced which has any pertinent bearing upon the theory.

Meanwhile, whilst waiting for this fact, or for any other which I am most anxious to hear, because I know of no extravagance of the human mind, *prior* to its boasted enlightenment by the experimental teaching of Lord Bacon, so utterly at variance with all known data as this doctrine of a vitrified crust, I will permit myself to ask M. Faber one or two questions. I do not mean to quarrel with his English; I wish his science did him equal credit, or that I could make German half as good. In the first place, where was the immense mass of water which covers the greater proportion of the globe at the time all these nice little smelting and melting operations were proceeding? It surely would be prudent to make some provision for this small item before beginning the theory. Dutch geology may, perhaps, be of assistance, and show how it was all kept back by dykes, which were moved forward as each patch was melted, just as sheep are penned and re-penned in a field of lucern, until the whole is carefully devoured without spoiling any part. I should like to have some *facts* upon this head, or to hear if he has any evidence that at any period the terrestrial ball was destitute of water. It is true we live and pursue our crotchets upon land, whilst only insignificant fishes occupy the sea; but in treating of fundamental principles we must deal with space, irrespective of its inhabitants. The proportion betwixt land and sea is no way altered even by the existence of a hundred vitrid crustmen upon *terra firmâ*. The sea will roll on after their maggots are all hatched, or cracked, just as it did before. It would, therefore, be very desirable to hear something about the packing of this inconsiderable mass of ocean just out of harm's way, whilst "the practical and theoretical" operations of "science" were going forward. Secondly, I would ask M. Faber if he has ever noticed in his "chemical studies" a certain obduracy to the action of water which is presented by the products of vitreous fusion? Has he ever compared *mud*, or *silt*, with pulverised glass? Has he perceived any such affinity between rock and the scoria of smelting-furnaces as to furnish a good ground of belief that the secondary or sedimentary formations are the soluble detritus of a great slag? If the stretch of a convenient imagination can succeed through a long course of ages in triturating and mummying up the ejecta of the great glass-house into the old red sandstone, or the sedimentary slate, by what "chemical" process are the repellent particles of glass, or slag, to be converted into the primitive breccias, which are found reposing directly on the granite itself? There is no greater check upon the imagination than experience and calculation. I will, therefore, propound a problem to M. Faber:—Given a glass bottle to calculate the age of the world. Some of the deepest and most productive soils are found upon undulating granitic eminences, of which a row of quart bottles, carboys, and glazed pipkins, laid side by side, would not inaptly represent the hill and dale. Quart bottles are composed of silex, alumina, soda, potash, lime, and iron—the only difference being that they have not "cooled off" into mica and felspar. Now, if the time is only carefully observed which is required to produce by atmospheric decomposition a vegetative soil upon the surface of the bottles, and the depth of it in a given time is carefully measured, a simple Rule of Three will point out how long a granite soil of (say) 3 ft. in depth has been in course of formation, indicating exactly how many thousand years it is since that grand melting process ceased, and the granite cooled off.

I would further ask whether the sulphuret of iron, which is constantly found crystallised in beds of coal, and the sulphurets of lead and other metals deposited in the carboniferous limestone, and in other *carbonates of lime*, have been injected there in a melted state? I think the wildest theorist will hardly venture to assert so much. When, therefore, we *know* that Nature has a way of crystallising metallic sulphurets by aqueous action, I beg to inquire what right we have to assume that she produces them in any other case by different means? Is it the "opinion" of the authorities that some men and beasts feed through their mouths, and some through their toes and hoofs—that some trees grow with their leaves upwards, and some with them downwards, and the roots in the air? Of all the characteristics of Nature none are more distinguished than her economy and order; she produces the greatest and most varied effects by the smallest and most constant means. It is the very antipodes of philosophy to foist upon her our bungling and cumbersome processes. This is not "interpreting Nature." No one who has any pretension to *true* science will attempt to palm off his paraphrases upon the multitude; he will point to *facts*, not *fancies*; he will quote her voice in simplicity and truth, and where she does not answer he will be silent. Where she does speak so plainly as in the above instances, it is the fool only that will attempt to *improve* upon her.

ERRATUM.—"Mineral Veins, No. I.," third paragraph, for "non crystallising action" read—"non-crystallisation."

[To be concluded in next week's Mining Journal.]

ILLEGITIMATE MINING.

SIR,—I noticed the remarks in your last week's Journal, signed "R. S.:" the purport of that communication may be taken more ways than one. Why should the gentlemen named be selected as the only competent persons to give an honest report on mining? The writer must certainly have some object in view. Does not Cornwall contain at least 100 mine captains superior to these gentlemen? If not, I am mistaken; they are represented as the only competent men to give a just report, or otherwise, as the language may apply. Wheal Vor, as an example, as well as T. S. Cave's affair, speak volumes. I want men to be honest and speak out, the truth will stand; and I hope that your Journal, as the representative of the mining interest, will do its duty. H. EDWARDS.

Plymouth, Aug. 19.

ON LEGITIMATE MINING.

SIR,—Having for many years past narrowly watched the progress of mining, I am now thoroughly convinced that the majority of mines are started with no other view than to keep up a system of share selling, and that the intrinsic value of the mine is not looked at by the promoters, nor the majority of those who take up shares. They suit themselves with captains who best answer their purpose, rare specimens of whom we see brought before the public: the really honest and practical men have little or no chance whilst this system lasts; but I believe its days are numbered—truth is the only durable test: and I beg to inform the numerous and very respectable class of really practical agents who applied to me for the situation as manager of an extensive lead mine in Cardiganshire, that I have laid all their testimonials before the committee, and am not aware of any one being yet appointed. From their testimonials and real practical knowledge of mining, I should take it as a pleasure to recommend the majority of them to any company in want of really practical men, either for mines at home or abroad, and to assist them, as far as I am able, to carry out any mine they may engage in, on the system of legitimate mining.

Wiveliscombe, Somerset, Aug. 19. N. ENNOR.

TINCROFT MINING COMPANY.

SIR,—When I addressed you on this subject on the 25th July, I did not contemplate the late committee—*tria juncta in uno*—would, in "Veritas," show fight again. The trio held, and at this moment are known to hold, only a very insignificant portion of the shares. How, then, can they be "considerably interested in this mine?" That assertion is as false as their report, proved so to be by the contemptuous manner it was treated by the body of shareholders,—the party who delegated them a committee of investigation, and finally repudiated their conduct. The committee laboured bewildered in the wilderness for 40 days and nights; they then slept upon their labours for 40 days and nights more, and what a conception it was when brought to temporary and transient life in 39 pages of ridiculous rhodomontade and rubbishing rigmarole! It met, however, with its true deserts—the party causing the inquiry to be made kicking it contemptuously from them as they would a foul abortion.

As "Veritas" states "that the committee's report is true" (after the meeting emphatically pronounced it false and unfounded), and as he promises to "address you again on the subject of Tincroft Mine," let me advise him to rise from his slumber early on Monday morning for the purpose, pen what he may with his real name (not "Veritas"), and then will the board and shareholders pay some attention to his communication; otherwise he has his answer already in the explanations given by Mr. Johnson, the remarks of the chairman, and Mr. Field's motion that "the committee took a most erroneous view of the state, prospects, and management of the mine, and entirely failed to substantiate the grave charges made."

Subsequent facts tend to prove that the view taken by them was monstrously erroneous in every respect. Then why attempt to injure the property in the eyes of the mining public any longer? Why talk of "the committee and the shareholders who support them?" Who are these imaginary beings? The trio are now, figuratively speaking, one, two, three, and their "supporters" four, five, six, the whole force they could bring into action on the momentous day of meeting, when the first trio looked like the weird sisters, the second not even supporting them, either in faith, hope, or charity.

The letter of "Veritas" is merely a ridiculous recapitulation of the committee's fancied mountain in labour, and will terminate as their feeble endeavours did—mouse-like, without "character, justice, logic, or fair dealing;" and a greater proof of weak judgment in mining need not be shown than the silly assertion made that "Capt. Treweeke's report does not, in any important particular, contradict that of Capt. Richards," when, in fact, it is in variance on every vital point touching the state, prospects, and lasting value of the mine.

If the board are enabled, like good pilots, to "weather the storm," and bring the mine from its awfully represented state of debt and distraction to a profitable issue, without calling first for 6000*l.*, and then for as much more, as recommended by Capt. Richards and harped upon so much by the committee, which party will best deserve the approbation of the shareholders? This is of real "logic" the *ne plus ultra*, and worth a dozen columns of "Veritas's" idle out-pourings, which now are "flat, stale, and unprofitable." Past errors and omissions should, now they have been rectified, be forgotten, and "one and all" unite to guard against them for the future. More frequent meetings will ensure this being carried out.

It would, at all events, and as I before stated, have been "more manly and straightforward" had the committee given us their report six weeks earlier, which would doubtless have led to the appointment of two or more practical mine agents to inspect and report "the truth and nothing but the truth, setting down nought in malice," and this "explanation" would have rendered unnecessary the "tedious and painful" task so pertinaciously undertaken by "Veritas."—AMOR FRATERNUS: *Lombard-street, Aug.* 19.

THE MINERAL VEIN QUESTION.

SIR,—Pray do not let the clique of geological theorists lay the flattering unction to their souls that I have altogether quitted the arena. It is true that I did not consider myself justly treated by the way in which you lopped and curtailed my last letter, till you left it not a shadow of itself, under the pretence that you had ceased to insert letters containing personalities. Had you adopted that course, and excluded from the columns of your Journal the false and unfounded calumnies and insinuations so liberally bestowed upon me, I should never have used a personality. They were the first, as you can bear testimony, to provoke an angry discussion, which, with the generality of your readers, I deprecate. However, I cannot help feeling that in the instance to which I refer you did not fairly use your discretion. You allowed Mr. Evan Hopkins and his shadow, "Verax," to reiterate the charge that I was a jobber and gambler in mines, and Mr. Ennor to state that I, together with my worthy colleague, had applied to him by letter for a situation in a lead mine in North Wales only a week before. Now, God knows who is meant by my worthy colleague; I do not, but the party alluded to might have been guilty of such a crime. I have no penchant for banishment to the mountains of North Wales, and protest myself wholly innocent of it. Again, though largely interested in mines for a series of years, I am proud to say that it has only been in two instances, and that to a small extent, that I have sold shares in mines, but to a large extent I have prevented gambling in mining matters; but you having allowed them to make those and many other equally absurd and unfounded charges, upon my using a little stringent language, with a view to rebut them, and tendering some certain data of the so much boasted practical knowledge, turn round in a tangent, and obliterated all my explanations and denials of their misstatements and misconceptions, which, although writing under a feigned signature, might be of no consequence in my case, they might, nevertheless, be imputed to others, and do them mischief. Such, for instance, as that I could never show into Redruth but by night—an observation truly too absurd to notice; but I never saw but one Redruth man that I ever feared—viz.: the usher of the school where I took my degrees. Your correspondent, under the new signature, "Enquiry," in a letter, where it is clearly his object to attack others as well as myself, rejoices in the belief that their united slanderous efforts had driven me from my determination to put down empiricism and quackery wherever I met with it. The result will testify to his disappointment. Give me a fair field, and no favour; I ask no more. Either refuse to admit the subjects they would insert irrelevant to science, or allow me the privilege of replying, whether in relation to scientific questions or otherwise. But the letters of Mr. Evan Hopkins and his prototype "Verax" have been, during the whole controversy, so devoid of everything bordering on science, that verily they have led me to wonder what had become of the abilities of the man who pretends to see through a millstone. They were a tissue of groundless abuse, excepting the trifling display of wit which he still, I perceive, chuckles at, of placing me amongst the gems of the Crystal Palace. How the joke would have amused Joe Miller. It was only the rush of the rocket which so startled him; it has not yet exploded. The stars are yet to come, and woe to the unfortunate theorists on whose devoted head the stick may ultimately descend. Your correspondent, Mr. David Mushet, some time ago, in his anxiety to rescue his friends, published a letter to the effect that mine had been the means of depreciating the value of mine shares: it did him no credit in the tin mining districts. Mr. Hopkins and Mr. Ennor's letters went to deny the value of any Cornish tin mines beyond 100 fathoms deep. I insisted that the deep tin mines are the best and most productive in the county. Every really practical miner has borne out my statement, and Dolcoath, once a rich copper mine, is now in her dotage a rich tin mine, 250 fms. from the surface. I did not then take up his letter, because my previous ones served to confute him; but when he presumes to write in relation to things which he does not, and, perhaps, can never, understand, I shall let off one of my rockets, as a signal to the public not to believe all they read. Mr. Mushet has commenced a series of letters, manifestly to enlighten us on the origin of mineral veins, and he expresses his surprise that after all which himself, Mr. Hopkins, and others have written upon the subject, there should be any scepticism at all about it; but really he must give us some better evidence of his ability to instruct than he has set off with in the commencement of his second letter. I shall content myself just now by denying the position taken up. He is not correct in saying that lead always ranges itself at the north and south *opening*, and that copper and tin prefer the east and west *fractures*. The greatly productive lead mine, East Rose, is in an east and west course. The celebrated tin and copper mines, Levant and Botallack, are nearly north and south courses. Balleswidden Tin takes a north and south course. The Great Crinnis Copper 45° north; but time will not suffice me to point out the numerous discrepencies which I might in this respect. Mr. Mushet, unquestionably a clever scientific man, is "blundering at every step he treads" upon the mineral vein question. Excess of potash (he says) seems eminently favourable to metallic fertility in copper. Where, then, does he find his excess of potash in the clay-slate and greenstone formation (the irestone of the miner)? Potash may be said to be in excess in the felspar of some granites, the maximum being, I believe, about 16 per cent.; but if the rock or stratum has anything to do with the production of metals, it is equally congenial for tin. But no; according to Mr. Mushet, we must look for tin in the magnesian districts. Is it so? By no means: in all the stanniferous fields of Cornwall he would not find ¼ cwt. of it. The nearest magnesian field is in the serpentine of the Lizard, a distance of many miles from the principal tin mines. Again, rich deposits of tin are frequently met with in the decomposed felspar of the Wendron and St. Austell districts, but in these cases the felspathic clay or kaolin is wholly deprived of its potash, if it ever possessed any. But (says Mr. Mushet) lime seems to promote deposits of lead; here, again, his rule is at fault. The great deposit of lead in the East Wheal Rose is solely in clay-slate, and far removed from any lime formation. So are those of Wheal Golden, Penha's, Wheal Rose, &c. In conclusion, Mr. Mushet imagines a metalliferous channel of many hundreds of miles in length. This is but a short stretch for the imagination, but it is considerably more than the eye can reach, and I give it up in despair.

Camborne, Aug. 18. PRACTICAL MINER.

[We have on this occasion inserted a "Practical Miner's" communication entire, with the exception of omitting a few objectionable words, as he complains of our mutilation of his last;—but we must repeat, that unless the language ceases to be personal, and is strictly confined to the question under discussion, it will in every case be rejected, or at least qualified to something like a respectable and gentlemanly tone, let the communication come from which party it may. We should also recommend "Practical Miner" to be a little nearer truth before he jumps at conclusions; we know, of our own knowledge, that the East Wheal Rose great lead lode is direct north and south; and Mr. Mushet was quite correct in his observations as to the *general* bearing of the most productive lodes, lead, tin, and copper; limestone being peculiarly favourable for lead—*ergo* mountain limestone. Also, on referring to the letters of Messrs. Hopkins, Ennor, and Bryant, our correspondent will observe that they have not denied the value of all tin mines below the 100 fm. level; what they maintained was, that it would be difficult to find 11 that have paid from *tin alone* below that level.]

CAMBORNE CONSOLS.

SIR,—In your Journal of Saturday last, you have inserted a very impertinent letter, subscribed "Enquiry," who, smarting under some real or imaginary injury, or, more likely, some well-merited castigation, wishes, it would appear, to vent his spleen upon me; and he exists under so many aliases and localities that it is difficult to deal with him, though his real habitation and his name are sufficiently obvious to enable me to say that but for an abundance of *brass* with which he continues to impose upon the more credulous part of the community, and thus occasionally to transmute it to precious metal (his *tin*, he says, has been drawn from him), there is a vast deal more silver in the stores of the mines, from the discovery to which he has referred, than would otherwise have found its way into his pockets, and more silver will be added to it. For what purpose I retain it on the mine is my business, not his, as he neither is, nor ever was, a shareholder in this mine, or in any way interested in, or connected with it, nor is he ever likely to be so. Yet he has dared to put a deliberate falsehood before the public, and not only to designate himself a shareholder, but even to assert that he has been called upon to contribute, which I denounce as a most unfounded fabrication. This conduct is not to be mistaken; were he to succeed in his purpose of depreciating the value of the property, it might damage the out-adventurer, but would fall harmlessly upon myself, who am too well advised of our present prospects to be shaken by a reed. "Enquiry" has truly said that we are surrounded on all sides by good mines, managed by steady and practical men; and this is an advantage which I greatly appreciate, having the good fortune to stand so well with all of them that I am always in a position to avail myself of their undoubted scientific attainments and abilities; and I often embrace the opportunity, both on my own as well as my co-adventurers account. I presume that "R. S." will not think it necessary to offer me his advice on mining matters; but I may as well tell "Enquiry" what is considered by the practical men of this district the only legitimate mining, taking it in the limited sense he applies it—First, they discard the illogical reasoning and delusive theories of terrestrial magnetism, with all its crude deductions and absurdities, as untenable. They deal in like manner with the theory of mineralised strata, nor would they wait for the slow process of the infiltration of water surcharged with mineral substances; but, as far as their means enable them, they search for, and find, the metalliferous veins themselves; and they judge from the appearance and character of such veins without reference to the surrounding strata, and thence form their conclusions as to the most profitable mode of working to be adopted; and they generally persevere in laying open the lodes they are so fortunate to meet with, even though they may not at first present any metalliferous properties, satisfied, and taught by their daily experience, that in this highly-charged mineral district they will sooner or later reap an abundant reward for their perseverance and outlay. This, too, is the mode of procedure of the directors and managers of the Camborne Consols, and they have the advice of Capt. Vivian, the manager of North Roskear and other mines, as well as of Capt. Hodge, Capt. Dunkin, and Capt. William Thomas, of the Roskears, and several other highly skilful mine agents, as to the best course of working, which they have all agreed is the one adopted. We have happily so nearly reached the points to which our energies have been directed that it will matter but little to the shareholders a short time hence whether they are on the cost-book or otherwise; though if it were true that "Enquiry" was a *bonâ fide* shareholder, and the concern was likely to turn out expensive, the Cost-book System would doubtlessly present the best mode of reaching him. "Enquiry" has made his attack upon me the vehicle of another upon the "Practical Miner," who, to judge from his recent correspondence, is perfectly qualified to repel it, should he deem such an insignificant missive worthy his notice.

Camborne Consols Mines, Aug. 18. F. DANIELL.

CAMBORNE CONSOLS.

SIR,—A correspondent to your Journal, dated 2d inst., made an inquiry as to the state and prospects of this mine, which was answered by Messrs. Francis Daniell and Von Uster. As one of the labourers in the mine, I am prepared to state that their replies are not quite consistent with the facts. One fact is that the parcel of copper ore, now at the surface and ready for sale, weighing, perhaps, 10 or 12 tons, and worth about 7*l.* per ton, is the sole produce of eight months' working; and yet Mr. Daniell says—"We are, perhaps, raising sufficient ore to about meet the cost upon the present scale of working," so that 10*l.* per month is sufficient. It is quite true that that small sum will go far towards paying the cost as the mine has been managed during the last three or four months; for the men have been paid nothing for upwards of three months, and there is now due to them about 250*l.* There is also due to the whim-drawer more than 100*l.* This creditor, I hear, has taken legal steps to recover the amount; and the labourers are about to follow his example, unless shortly paid. It is very hard upon poor men to keep them, their wives and families, without their wages for such a period; and they have in consequence deserted the mine, which is now idle—the men declaring their determination to work no more until they are paid. I have heard, too, that the merchants are not paid. It is quite plain to us that the mine cannot be worked any longer upon the present system. If the present company do not advance money to work in a miner-like way, they had better relinquish immediately, that other parties may take it in hand, who will do justice to the mine, which is well worthy of an effectual trial. It is at present very poor, but kindly—only requiring capital and good management to make it profitable. Such is the opinion of—A LABOURER IN CAMBORNE CONSOLS: *Camborne, Aug.* 19.

P.S.—"Enquiry" is not aware, it appears, that, but for your interposition, "Verax" and Mr. Ennor would have been smashed. You are aware that "A Practical Miner," instead of a rocket, had provided a cannon to bear upon those gentlemen, charged with missiles which would have "settled" them; but you, not choosing to be an accessory before the fact of their intended annihilation, declined to allow the match to be applied through the Journal, which might have led to an inquest, at which "Practical" would have been acquitted by a verdict of "justifiable homicide," upon the ground that he acted in self-defence.

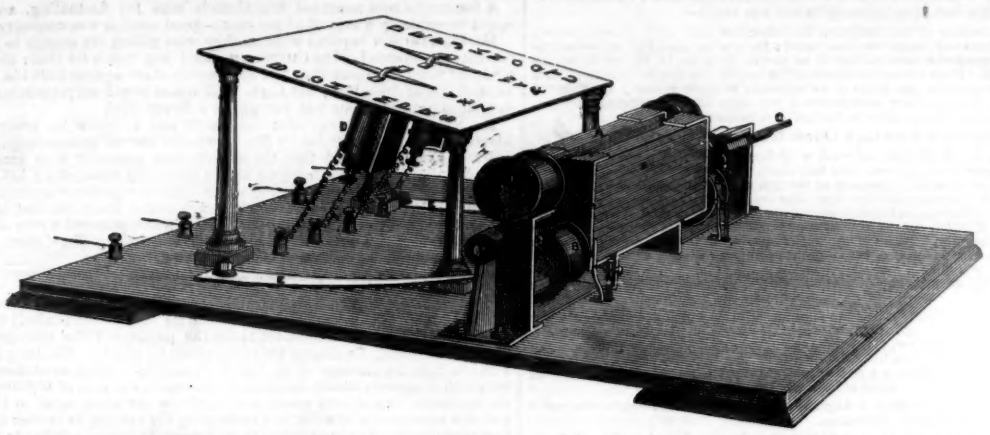
ANGLO-CALIFORNIAN GOLD MINING COMPANY.

SIR,—In your last week's Journal, and the previous one, I perceive two country shareholders require that Mr. Williams and the directors should give a candid statement of the affairs of the company. The directors have stated they were deceived by Mr. Palmer, the engineer-in-chief. Sir Henry Huntley is now in California, and, no doubt, prosecuting the search for gold. To enter into a public discussion would injure such a company, constituted as this has been. The promoter has always expressed his readiness to answer privately the queries of any *bonâ fide* shareholder, though he by no means wishes to render himself prominent, convinced that publicity can do no good, but expose the state of affairs and injure the value of the property. The settlement of the dispute between the different parties of the direction is in course of arrangement. The Mariposa property is now leased to the company; and there is every prospect that the next advices will give promises of a dividend. Reports will then be issued to the shareholders, which it is anticipated will fully justify the confidence which they have hitherto placed in the direction, and which, it is hoped, in spite of the present slight difference, will not be withdrawn from the general body.—W.: *August* 21.

WESTERN RAILWAY OF FRANCE.—At the present day, a railway prospectus is a somewhat novel document. Nevertheless, such an one now lies before us—being a proposal for completing the railway from Paris through Versailles to Chartres, La Louppe, and Le Mans, by an association of English capitalists. The concession has been granted to Messrs. Peto, M.P., Geach, M.P., Brassey, Betts, Fox, Henderson, and Stokes; and the shareholders to act as trustees for the English association are the well-known names in the railway world of Cropper, Ellis, Ewart, Glyn, Donnelly Mangles, Rotheram, Scholefield, Schuster, Smith, and Brown Westhead. The capital required is 1,320,000*l.*, in 44,000 Class A, and 22,000 Class B shares, of 20*l.* each, to carry the line to Le Mans, with power, by the issue of further shares, to increase the capital to 2,200,000*l.*, when required to extend the line to Rennes—such new shares to be offered to the then holders of original shares. The line as far as Versailles has been worked for some years, and by a contract annexed to the law is now given up to the Western of France Company. The line from Versailles to Chartres has been completed by the Government. The passenger traffic averages 1500*l.* per mile per annum, and goods 500*l.*; it is calculated to leave a nett profit of 69,000*l.* a year on the 46 miles; and the line from Paris to Chartres will be immediately taken possession of by the concessionaries, on depositing 200,000*l.*, as required by law. The conditions then are, the Government will purchase and pay for all land, execute all earthwork, bridges, tunnels, &c.—the company to provide the permanent way, construct the stations, and supply the plant and rolling stock for working the line. Between Chartres and La Louppe the earthworks are complete, ready for the permanent way. Between La Louppe and Le Mans the land is bought; but the Government require 400,000*l.* to complete the works, which sum the company are to supply at about 40,000*l.* per three months, to be repaid. The leading features of this undertaking are a Government guarantee, producing 6 per cent. on Class A shares; no competing railways or canals; responsible contractors to perform the engagements within the estimates; 46 miles open, producing an immediate revenue of 50,000*l.* per annum; in one year a line of railway 68 miles long, and in three years 128 miles, at an outlay of only 1,320,000*l.*, including a loan of 400,000*l.*, to be repaid; a prospect of 106 additional miles at less than 4000*l.* per mile, and certainty as to remunerative traffic. The English subscribers will form a joint-stock company, to be completely registered under a Deed of Settlement. Until the final extension, the company are to have all the profits of the line; after which, they divide with the Government all above 8 per cent.

The order issued by the Admiralty, that no contract mail steamer should be built of iron, has been rescinded.

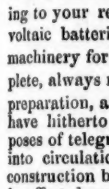
THE MAGNETO-ELECTRIC TELEGRAPH.



SIR,—In the *Mining Journal* of August 9th there is a statement to the effect that the Magnetic Telegraph Company's Act (Henley's patent) received the Royal Assent on the 1st of August. As I have not yet seen in your valuable columns any description of the important practical improvements comprised in this patent, for the proper working of which the above company has been formed and a Charter of Incorporation solicited, I am induced to believe that the following particulars will be generally interesting to your readers. The invention entirely dispenses with the use of voltaic batteries of every description, together with all the complicated machinery for making and breaking contact. The circuit is always complete, always ready for action at a moment's notice, without trouble or preparation, and entirely independent of those multiplied casualties which have hitherto attached to every application of the voltaic force to purposes of telegraphic communication. The necessary currents are thrown into circulation by the movement of conducting bodies of appropriate construction before the poles of a magnet, and the manner in which this is effected so as to insure results the most certain and the most lasting will be readily understood, by reference to the annexed drawings.

Fig. 1 represents the instrument complete out of its case. It consists essentially of two distinct parts—one for producing and transmitting the current in the required direction, and the other for receiving its indications from a distant station. The first consists of two compound permanent bar magets, A, A, placed side by side in a horizontal position, with their opposite poles in juxta-position, and about an inch apart. Opposed to the poles, and nearly in contact with them, are two soft iron armatures, B, B, turning on separate axles. The terminal cylinders of the armatures are wound with long coils of covered copper wire. The coils at each end are continuous and undivided, and, with the soft iron cores which support them, are moveable in an angular direction by means of two levers, C, C. The motion is limited by India-rubber stops fixed on the brass casting on which the magnets are placed and the axles suspended. It is proper to observe that the ends of the permanent bar magnets are capped with rectangular pieces of soft iron, projecting inwards, so as to leave but an interval of half an inch between the poles. By this arrangement the magnetic power is effectually preserved and concentrated. The second part of the instrument consists of a dial mounted on four pillars in an inclined direction—this being the best for reading the indications, besides reducing the friction of the needle pivots to one-twentieth part. Under the dial are two electro-magnets, one to each needle. Attempts have before been made to apply electro-magnets to the deflection of the needle, but they have never succeeded, owing to the residual magnetism left in the bar after the battery current had ceased to flow. In the magneto-electric telegraph two semicircular pieces of soft iron are screwed to the poles of the electro-magnet, so as to convert the two poles into four. In the centre of the conjoined semicircles is suspended a short and well-magnetised needle of hard steel, the axis of which is prolonged through the dial, and carries the index or pointer. This arrangement is shown in section in the small fig. 1, and in plan at fig. 2.

Fig. 1.



Now, it is obvious that, on pressing down either of the levers, the ends of the armature to which it is attached change their position with reference to the poles of the magnet; and, according to the well-known laws of electricity, a current is, therefore, induced in the coils of copper wire which surround that armature. The connections are such that the current so induced is caused to circulate round its appropriate electro-magnet, both at the transmitting and receiving stations; and the needles upon which they act are accordingly deflected to their respective stops with a perfectly dead beat. There they remain so long as the depression of the lever is continued; but the moment this latter is allowed to spring back to its original position, a second current is induced in a contrary direction, and the needles return with another dead beat to the point which they have just quitted. By the variation and combination of these movements the several indications are afforded, corresponding to the letters of the alphabet; and in this way communications are conducted as in the ordinary telegragh. The instrument altogether is so far in advance of its predecessors, and so completely, so exquisitely does it fulfil the various important functions which were contemplated in its design and construction, that it would be difficult to overrate its value as an obvious means of perfecting the telegraphic communications of the kingdom. The unmistakable decision which is given to the various indications by the dead beat of the needle, already referred to, will be appreciated by those who have been in the habit of working the ordinary instruments; but the most curious and striking part of the whole arrangement is, practically speaking, the character of the electric current which is thrown into circulation. It travels just where it is required to travel, avoiding all those accidental deviations which exercise such an exhausting effect upon the ordinary voltaic current, and sometimes render it utterly powerless in the transmission of intelligence. A very fair sample of this fact was exhibited a short time since upon the South Devon Railway, where, subject to the most imperfect insulation, and the worst conceivable weather for telegraphic purposes, the communications were not once interrupted or even impaired. The experiments also which were recently performed in Hyde-Park, and across the Serpentine, were even more strongly confirmatory of the practical excellence of the arrangement, for there all was conducted under the public eye; and though the tests to which the apparatus was subjected were of the most severe and studied character, it was not found to fail in a single instance; and this leads me to speak of something very strange, and apparently anomalous in the quality of the current itself. It will not divide and weaken its energies by passing in any quantity down the posts of the line when these are wet and deficient in insulating power; nor will it be diverted from its course even by direct contact with a body of water; and yet in using the earth as a part of the circuit, it is found that the smallest and most imperfect contact is sufficient for the purpose. Within the last week, a short line was brought into operation at the Welwyn Tunnel, on the Great Northern Railway. Those who went to set it to work found that the engineer had neglected at one of the extremities to supply an earth wire. A spade happened to be lying close by, not sticking in the ground, but merely laying upon the surface of the dry chalky soil. A wire was hastily attached to this, and instantly the circuits was not only complete, but was all that could be desired, for during the whole day communications continued to pass through this medium. I feel convinced, indeed from experiments that have been made that a penny piece, soldered to the end of the wire, and thrown upon the ground, would be quite sufficient to complete the circuit; but how are we to explain this seeming anomaly? The fact is that the current, though small in quantity, is of that precise intensity that it will pursue without deviation the path of a good conductor, when such is offered for its transit; and when no such medium is present, it is sufficiently powerful to force

Fig. 2.

its way without difficulty through the substance of imperfect conductors; hence the integrity of the current along the line wire, and the ease with which it returns by the earth.

In my next communication I will forward you a description of a recording telegraph, which has just been brought into operation, and owes its efficacy in a similar way to the magneto-electric current. I cannot, however, close this article without adverting for a moment to a more general topic, and bearing humble testimony to the justice of your editorial strictures upon the conduct of certain persons in Parliament during the recent discussion upon the Patent Laws. Can it be possible that in this remarkable year of the present most enlightened century there are men in the British Legislature so blind to the realities around them—so dead to every other feeling but that of self-interest—as cooly and deliberately to avow before the hereditary and elected wisdom of the realm that the time has arrived, *in their opinion*, when the Patent Laws ought to be abolished, and mental effort deprived of its legitimate reward? Why, a man but one remove from a lunatic must know and feel that the commercial and political greatness of this vast country is wholly and entirely dependent upon the industry of her sons. And is protection to be accorded to that industry, and refused to the master minds by whom it is directed? Are they no longer worthy of consideration, by whose deep thought and patient reasoning the elements of muscular power and the heterogenious forces of the inanimate world have been marshalled into such consummate order, and made to achieve the grandest the most exalted results which are attainable by unity of purpose and economy of application? Who are the men that have created those busy hives of industry in the midland and northern counties of the kingdom, giving life and employment to hundreds of thousands, and stocking the whole civilised world with the necessaries of existence? In a word, by whose instrumentality have those wonders been achieved in mechanism, in steam, and in electricity, which, while they have enlarged the dominion of mind over matter to an extent which no man could even have contemplated before it was absolutely accomplished, will cause this age to be looked upon in after generations as a great landmark in the intellectual history of man—a true era of transition from a state of mental darkness to one of comparative light? By the very men who, in the opinion of these profound politicians, ought to be at once disfranchised of those rights and privileges which are the *inalienable prerogative* of the members of every free community—the right of labour, whether mental or physical, to participate in the enjoyment of those benefits which it succeeds in creating.

There can indeed, Mr. Editor, be little fear but that such puerile efforts to enthral the intelligence of the land will meet with little success, and that they will ultimately prove as abortive in themselves as they will ever be disgraceful to their authors; but I do hope and believe, notwithstanding, that a fair and free exponent of public opinion, such as the *Mining Journal* has ever proved itself to be, will carefully watch the progress of these insidious movements, and will, when necessary, hold up all such rotten attempts at legislation to the scorn and ridicule of the thinking community, and the unmitigated execration of the industrial world.

With regard to the bill itself, the discussion upon which has caused these remarks, I firmly believe, notwithstanding the show of ministerial favour with which it was received at the finish of the session, that it was never intended to pass; and I am inclined to think that if Ministers had not passed a compliment upon their own diligence in the Royal speech, they might have found it a matter of difficulty to get any one else to do it for them. So much for Patent Law Reform.

ISHAM BAGGS.

LITERARY NOTICES.

A Treatise on the Screw Propeller, to be completed in 12 Monthly Parts. Illustrated by Steel Plates and Woodcuts. Part I. By JOHN BOURNE, C.E. London: Longman, Brown, Green, and Longman. 1851.

The screw propeller, although it has by no means superseded paddle wheels for the propulsion of steam-vessels, has yet made such advances in the course of the last quarter of a century as to entitle it to great consideration; and while a history of the application of this mechanical contrivance to ships is highly interesting, as carrying us back into ages long gone by, we know of no one better qualified for the task of tracing out its earlier applications, following its progress through the lapse of centuries, and laying before us its advantages and defects, than the author of the work now before us; whose works on the steam-engine, and other mechanical powers, are duly appreciated by the public. Mr. Bourne informs us that the screw propeller is in all probability a very ancient contrivance, and said to have been in use in China for ages, but in Europe the idea appears to have been derived from the windmill, or smoke-jack, or from the screw of Archimedes, much used in some countries for raising water. The two former contrivances were in extensive use by the ancients. In Hero's *Spiritalia*, a work written 130 years before the Christian era, a windmill similar to those now in use is described as applied to blow an organ, the air being forced into the air chest by means of a cylinder and piston. The windmill was also in ancient times much used for raising water; and in the countries east of Persia many ancient ruins of villages, forts, and windmills, were lately to be seen. The smoke-jack would naturally suggest itself to a people using chimnies, which are much more ancient than is generally believed; its first adoption to clear rooms of smoke is ascribed by most writers to have been in the time of Elizabeth; but in Coningsburg Castle, in Yorkshire, built about 1070, there is a chimney of excellent construction, built in the thick walls, and evidently part of the original building. The *hypocausta* and baths of the Romans also had chimnies. The use of windmills and smoke-jacks would naturally suggest the idea of applying the blades or threads of a screw as a propelling power in water; and the author considers pretty certain that boats propelled by wheels moved by oxen were in use by the Carthaginians and Romans. Coming to more modern times, we find that Robert Hooke, born in 1635, and who died in 1702-3, one of the most remarkable mechanical geniuses this country ever produced, among his numerous inventions constructed a feathering paddle-wheel, precisely similar to that now known as "Oldham's patent," and a screw propeller on the principle of the sails of a windmill. We have then a sort of engineering history of the progress of propellers, the designs of Leupold, 1724; Du Quet, 1731; Bernouilli, 1752; Emerson, 1754; Paucton, 1768; Bushnell, 1776; Bramah, 1785; Lyttleton, 1794; Shorter, 1800; Dallery, 1803; Stevens, 1804; James, 1811; Trevithick, 1815; Buchanan and Millington, 1816; and Delisle, 1823. These details are highly interesting and instructive, the several inventions are illustrated by well executed wood-cuts, and the frontispiece is an engraving from a steel plate of the engines of H. M. steam yacht *Fairy*, as also applied to the French mail steam packet *Faon*. The number is well finished as to type and paper, concludes with copious tables of the dimensions and performances of all British and foreign screw steam-vessels, and gives promise of the production of a quarto volume of standard merit on this interesting and important subject.

Exhibition Tracts—No. I. *How to Reward all the Exhibitors.* By STEPHEN GEARY, Architect. London: W. J. Adams.

This is the first of a series of publications relative to the concluding arrangements of the Great Exhibition. The main object of the present number is stated to be the proposal of a general distribution of rewards to *all exhibitors*, in justification of which Mr. Geary states that the Great Exhibition, although peaceful in all its effects and action, is yet decidedly analogous to a battle, and the result nothing more nor less than a complete victory over prejudice, supineness, and apathy; therefore, for the same reason that gives to all the soldiers—privates as well as officers—a share in the spoils of victory, he proposes that "upon the very same principle should the rewards be distributed amongst all parties connected with the Great Exhibition. Those who have been most prominently engaged, and rendered the most essential service, either by their skill and ingenuity in the production of works of superior merit or otherwise: and also those to whom the jurors have awarded prizes should be considered as the officers of a regiment, and, therefore, entitled to a higher share of reward, and the remainder of the exhibitors as the soldiers and subalterns engaged. * * * The Royal founder, Prince Albert, would of course be considered as the commander-in-chief, and, therefore, entitled to the greatest share of praise in this victory of science, and well does his Royal Highness merit it." But, says Mr. Geary, "what can we accord to his Royal Highness more than he already possesses? He is beloved and respected by all, be they noble or great, old or young, rich or poor. His praise is upon every lip; and one prayer reigns in every heart, that his life may be spared to continue that assistance in the promotion of art and science, and in the cause of benevolence and charity, that he has so long been wont to bestow. Yet as the founder of the Exhibition, some public momento should be erected, in order to testify the nation's gratitude to his Royal Highness, for the high honour which he has thus caused to be conferred on England, and also for the support he has since rendered to the Exhibition. * * * Next to his Royal Highness Prince Albert, must prominently rank the names of those talented artists Joseph Paxton, Esq., F.L.S., and Charles Fox., Esq., C.E., who have exercised such extraordinary skill in designing, and displayed such persevering ingenuity in constructing, the mighty Crystal Palace." These gentlemen it is proposed to make baronets; and the like dignity is demanded for Mr. Peto, M.P., who rendered important services to the undertaking in its early stages. The services of the civic dignitaries of the year 1850 are very properly noticed by Mr. Geary. Whatever may have been the meritorious exertions of the present civic officers, it is quite certain that it was their predecessors in office (Alderman Farncomb and Sheriffs Nicholl and Lawrence) who bore the burden and heat of the day; therefore, it seems not just that the present officers should have dignities and honours showered upon them, whilst those of the year 1850 are passed by unnoticed. This little work contains many more suggestions equally pertinent and sensible, and ought to be generally perused.

TO DOCK COMPANIES, WHARFINGERS, COAL, STONE, TIMBER MERCHANTS, AND OTHERS.

PATENT STEAM WHIPPING COMPANY.—Messrs. E. & A. PRIOR the Managers of this Company, are now UNLOADING, by means of an ENGINE (as shown above), their COLLIERS in the THAMES, at an average rate of 20 tons per hour, or upwards of *two hundred* tons per day, and at a considerable reduction in cost.

They have numerous highly satisfactory certificates from captains whose ships they have discharged, and to the owners of which the greatly increased dispatch is obviously a matter of the greatest importance.

The remarkably small dimensions and weight of the engine admits of its being placed on, and removed from, the ship's deck with the greatest facility and dispatch, by means of the barge and derick,

These engines are also thoroughly adapted for unloading in the docks, or for permanent use on board all large ships, where, in addition to working out the cargo, they might be most advantageously used for doing all the other heavy work, such as pumping, lifting the anchor, warping, &c.

This company are now prepared to contract for the unloading of any quantity of coals, or to grant Licenses for the use of the patent, on application to the managers, Messrs. E. & A. PRIOR, 153, Upper Thames-street, London.

IMPROVED LIFTING JACKS,

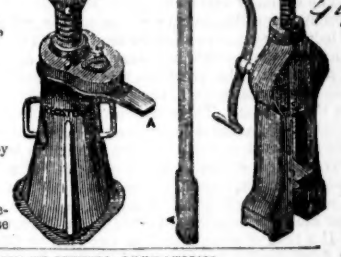
MANUFACTURED BY

W. AND J. GALLOWAY,

PATENT RIVET WORKS,

MANCHESTER.

IMPROVED RATCHET JACK. HALEY'S PATENT LIFTING JACK.



The attention of parties who employ

Lifting Jacks,

is respectfully requested to the superiority of those annexed, over those hitherto in use.

IMPORTANT SAVING IN MINING OPERATIONS.

GUTTA PERCHA HOGAR PIPES, AND SPEAKING TUBES IN MINES.

The GUTTA PERCHA COMPANY have been favoured with the following important Letter from EBENEZER ROGERS, Esq., C.E., F.G.S., Abercarn Fach, near Newport, Monmouthshire:—

March 21.—In reply to your inquiry as to the use of gutta percha as a material for the Hogar pipe used for taking up water in sinking shafts for mines, I have pleasure in stating that my application of it for this purpose is perfectly successful.

The ordinary slide pipe is entirely superseded by the gutta percha Hogar pipe, and it will be evident to every person experienced in mining, that the flexibility and lightness of the latter admits of sumping in any part of the pit, without the great amount of labour attendant on that operation with iron pipes.

The freedom from liability to accidents in blasting, and the great facility with which repairs can be effected in case of damage, cannot fail to recommend your material to the notice of every person engaged in mining operations.

The gutta percha Hogar pipe, which we have now in work at the Abercarn Collieries, is about 20 feet in length, and after very severe trials in sinking through hard rocks, where the expensive slide and stock would be always liable to breakage, the gutta percha is little worse for wear. I am also glad to state that the 400 feet of speaking tube for communicating between the top and bottom of the shaft answers admirably, and is a great economist of time.

EBENEZER ROGERS.

GUTTA PERCHA PUMP BUCKETS.

COPY OF LETTER FROM MR. C. THOMAS, DOLCOATH MINE, CAMBORNE.

Camborne, Jan. 27.—Three gutta percha 12-inch pit boxes, or pump buckets, drawing water 7½-feet stroke, have been used and worn out in this mine, and I beg to inform you that they have lasted on an average six weeks each, giving double the average wear of leather boxes, or buckets. This alone is important in saving time and cost of changing boxes, especially in long lifts, and gutta percha requiring no nails for gearing, the working pieces will doubtless last much longer. On the whole, we much prefer gutta percha to leather for boxes.

CHARLES THOMAS.

SYPHONS FOR MINES,

FROM MR. A. CROSFIELD, TY MAUR COLLIERY, NEAR PONTY-FRIDD.

The gutta percha pipe sent me for the purpose of employing it as a syphon for drawing water from a damp heading at these works, answers admirably; and, although the pipe is so small, it is surprising the quantity of water passing through it. I consider that gutta percha piping may be applied in mines and collieries to very valuable purposes, and is especially adapted to be used on the syphon principle, where local circumstances will admit of such application.

MINERS' CAPS.

Northumberland Miner's Cap. Cornish Miner's Cap.

The GUTTA PERCHA CAPS are not only Waterproof, but afford peculiar protection to the wearer from the Falling of Loose Stones, &c. &c. &c.

EVERY VARIETY OF GUTTA PERCHA ARTICLES SUITABLE FOR MINES—viz. Hogar Pipes, Pump Buckets, Clacks, Speaking Tubes, Engine Packings, Syphons, Miners' Caps, Waterproof Soles, &c.,

MANUFACTURED BY THE GUTTA PERCHA COMPANY, PATENTEES, *No.* 18, *WHARF-ROAD, CITY-ROAD, LONDON.*

*** Specimens may be seen on application to the Company's dealers.

THE MOST EXTRAORDINARY INVENTION OF PULVERMACHER'S PATENT PORTABLE HYDRO-ELECTRIC CHAIN, is an event of the HIGHEST IMPORTANCE in the annals of MEDICINE and ELECTRICITY.—It relieves, without shock or other disagreeable sensation, instantaneously—the moment it is applied—all acute nervous pains, as rheumatic pains, nervous head, tooth, and ear ache, tic-douloureux, &c.; cures, when worn on the body for some time, by its mild but continuous action, a great number of inveterate diseases, as gout, local paralysis, hysteria, liver complaints, &c.; it precipitates metals from their solutions, decomposes unacidulated water, and shows all other phenomena of a powerful voltaic pile.

The instrument producing these effects weighs about two ounces—can be folded up in a pocket-book—is permanently connected, and ready for instantaneous use—requires, when excited by vinegar, no cleansing, and will, for personal use, last a man his lifetime—guarding not only himself but his family, friends, &c., against an immense number of complaints and diseases in which mild streaming electricity is a perfectly safe, certain, and mostly instantaneous remedy. No knowledge of electricity is necessary to apply the chain.—Incredible as may seem the above-stated facts, every person is welcome freely to test their truth, either at the depôt or at the stall in the Exhibition, Section X., No. 437, where thousands of people are daily admiring the wonderful effects and easy application of this small apparatus, which has, besides, excited the greatest interest at the colleges and scientific institutions in England and on the continent, wherever it has been exhibited.—The apparatus, with full directions for use, may be had at from 5s. 6d. to 22s., at the depôt, 193, Leadenhall-street, City, where the use and effects may be seen daily.

C. MEINIG, Manager.

TO THE DEPUTATION OF THE COAL MINERS OF NORTHUMBERLAND, DURHAM, AND LANCASHIRE.—No. II.

BY GOLDSWORTHY GURNEY, ESQ.

THE DIFFERENTIAL BAROMETER.—You have also requested me to give you an explanation of the instrument which was adverted to in my evidence before the Committee of the House of Lords last year, for measuring minute disturbances of atmospheric pressure. I was not examined as to the construction of this instrument; if I had been, I would have given it at the time. It is well known that slight changes of atmospheric pressure will sometimes occasion such discharges of fire-damp in a coal mine as to endanger, and cause explosion. The fall of the barometer indicates a reduced pressure of the atmosphere, and it is known that fire-damp is relieved thereby from its pent-up situation in air-pressed recesses about the workings, or in the goaves, or other places; and under diminished pressure it escapes by its re-action, and its elasticity into the galleries.

This is a mechanical explanation, and so far as it goes satisfactory; but as explosions and foulings of the mine oftentimes occur at, and sometimes before, the change of balance, previous to mechanical pressure taking place sufficient to account for it, we must look for other causes beyond mechanical disturbances. Meteoric changes, and some of the most important, sometimes occur entirely unconnected with any sensible change of atmospheric pressure. Hail and snow, wind and rain, wet and dry, heat and cold, often occur without the slightest change in barometrical pressure.

The same cause which produces wind on wind may probably disarrange fire-damp. The same cause which brings about meteoric phenomenon may do so, and be the same which produces a change in the weight of the atmosphere; so that the fall of the barometer is an effect, and not a cause, of some hidden disturbing influence, which simultaneously or previously occasions fire-damp escape, and the danger of explosion in a coal mine—Nature operates by insensible agencies, by powers we have no conception of, by laws far beyond our reach. The same agent probably which produces a difference even in the solvent condition of the atmosphere may at the same instant act to the very centre of the earth. We cannot tell; it surely may act near the surface. The hygrometric state of the atmosphere, for ought we know, may be more important for your consideration than its barometrical condition.

I may hereafter suggest for your consideration some known conditions on this head, and its connection with fire-damp. We will at present confine ourselves to the barometer. The moment of change, or break of balance, is the most important time to adopt precautionary measures, for the disturbing cause may have been acting for hours previous to any perceptible change in the barometer. It is highly desirably to be able to detect the first and smallest re-action. It has, I believe, been noticed at sea—where sailors, from experience of its importance, pay great attention to the rise and fall of the barometer—that the period of re-action is the most important period to enable them to anticipate a change in the direction of the winds, or the coming of an impending storm. It is equally, if not more, important for the pitmen to pay attention to the same fact.

The ordinary barometer is too sluggish. The changes of the surface of mercury from the concave to the convex, which it assumes on the break of balance, cannot possibly be read off. This fact and its importance was shown by the talented honorary secretary of the South Shields Committee, in his report "On Accidents in Coal Mines." You may observe the allusion he there made to the sympiesometer as a more delicate instrument for the purpose. There are, however, objections to this instrument, and another, of greater delicacy than the common barometer, is required. On this account it was that the one referred to was devised. This instrument was founded on the aneroid, substituting a moving fluid as a pointing range or index, instead of the complicated movement of hands and levers. The same principle can be applied to the ordinary barometer, with which you are more familiar. I will explain this arrangement as simply as I can.

If a tube of glass, closed at one end, be filled with mercury, and while so filled we dip its open end in a cup of mercury, holding the sealed end vertical, the mercury will fall down the tube, leaving a vacuum in the upper part, until the height of its column exactly balances that of the atmosphere. This will vary between 27 and 31 in., according to the weight at the time. This, you know, is the common barometer. You will observe that the quantity of mercury which rises or falls in the tube, to balance the changing weight of the atmosphere, will always be equal to that which is necessary as an equivalent to make up the required height of the column, irrespective of its solid contents. Thus, in a barometer tube of large diameter, a larger quantity of mercury will be required to go up the tube, to obtain a given level, than one of a smaller diameter; yet the variation of the level, the space moved through up and down, in both cases, will be exactly the same. You will observe, therefore, we can gain nothing by increasing the size of the barometer tube, to enable us the better to read off minute changes.

Let us suppose the barometer tube to be 1 in. diameter, or (say) equal to 1 in. sectional area, the rise of the column of 1 inch in height will require 1 cubic inch of mercury to come up the tube into the vacuum. If the tube be ¼ in. sectional area, then only one-sixteenth of a cubic inch will have to go up to raise the level. The disturbance, or space moved through, in both cases, will be an inch—no more or less in one than the other; and both will be an exact balance of the atmosphere, representing the change of pressure. I wish to call your particular attention to this, because the instrument about to be described is founded upon it.

In order that you may better understand me, we will, in the first instance, suppose we have a barometer tube about 1 in. diameter, and 4 or 5 ft. in length, closed at one end. We fill this with mercury to within 3 or 4 in. of the top, and then fill it up with water, till it runs over the open end. On placing the finger air-tight on the open end, and inverting the tube, keeping the end still closed, the mercury and water will change places; the water will rise to the surface of the inverted tube, and the mercury will fall to the bottom. While the finger is still on the end of the tube, place the end under the surface of mercury in a cup or basin. The mercury will now fall to balance the weight of the atmosphere, and the water will fall on it, a vacuum being left above the surface of the water. The water, it is manifest, swimming on the mercury will rise and fall with it. An inch of mercury will displace a cubic inch of water, and, of course, drive it up or draw it down the tube, higher or lower in the vacuum, as the case may be. The rise of level of the mercury and water in this case will be the same, because the diameters of the portions of the tube through which they move are equal; but if they are unequal, then their range would be unequal. Let us suppose the upper part of the tube, where the water works, to be less than that where the mercury works. It is evident the displacement of the water, depending on the rise of the mercury, will be equal to its volume; but having less room to move in will extend to a greater distance than the mercury, proportionate to the difference of the respective sizes of their tubes. Suppose the mercurial tube to be an inch sectional area, and the tube above the water connected with it to be 1-10th of an inch; 1 in. rise of the mercury would then displace a cubic inch of water, which, being driven up the tube into the vacuum, would extend to 1000 tenths, or 8 feet 4 inches in height. We have here a great range, an index by which we can sensibly read off the most minute disturbance or change of level. The change in the surface figure of the mercury, however minute and otherways insensible, may be accurately ascertained. The water range, or small tube, is called the "differential tube," and the larger one the "barometer tube." An instrument of such extensive range or length of the differential tube as the above can hardly be wanted. It would require correction for the height of the water, and be inconveniently long; but if wanted to save height and room, the differential tube may be turned zig-zag or spiral. It would then come within a convenient size, and the columnial pressure of the water would be of little consequence, and hardly require correction. If you wish, you may have it of such sensibility, but an instrument of less range will be sufficiently sensitive for your purpose. Let us take such areas in the tube as we know will not interfere by capiliary attraction, or by the attraction of cohesion, to disturb the certain and uniform working of the differential fluid, yet at the same time be sufficiently delicate for practical purposes. A differential tube of less than ¼ inch in diameter will not work well. The fluid, whether water, spirit, or oil, will hang and stick to the sides of the tube, so as to interfere with its perfect freedom of action. The size of the mercurial one is of little consequence; so far as respects the ratio of proportion, it is only necessary to have the part of it where the surface of mercury ranges up and down to be of large dimensions.

[To be concluded in next week's Mining Journal.]

Last week a large wrought-iron beam, forty-five feet long, and weighing nine tons, was conveyed through Wigan, from Haigh Foundry, on its way to a colliery at Mostyn, North Wales.

SILVER VALLEY AND WHEAL BROTHERS MINING COMPANY.

At a meeting of shareholders, held at the office, Hatton-court, Threadneedle-street, on the 18th inst., the following report was read:—

Since the last meeting of the company, the committee have acted in every respect up to the suggestions and resolutions then passed; the cost has been kept as low as compatible with the operations recommended to be carried on at the 14, 24, and 35 fathom levels at Oak shaft. From the weekly reports of the captain, the lode in these levels have continued to improve, with indications of an approach to silver ground; and from the reports and assay, there is every appearance of the mine becoming immediately productive, and realising the high expectations set forth in the prospectuses.

The following reports, from Capt. Oliver Matthews, were also read:—

Callington, Aug. 7.—During the last week or 10 days we have discovered a rich branch of silver ore in the 24 feet level, west from Oak Shaft, and have broken some fine specimens from it, which upon assay produce at the rate of 2387 ozs. of silver to the ton of ore, or in actual value, nearly 600*l.* per ton. The branch is about 5 inches wide, composed of flookan, white iron, and thickly impregnated with gray oxide of silver and silver-lead—specimens of which may be seen at the company's office, in London. Since we have made this discovery, the ground has much improved for driving. In the 14 fathom level the lode is a very fine gossan, and looks promising for silver. The lode in the 35 fathom level is very similar in composition to that in the 24 fathom; and as the ground is easier for driving, we may reasonably expect soon to meet with ore as rich as in the 24 fathom level.

Callington, Aug. 16.—From the lode in the 24 fm. level (in which a discovery of silver ore, containing 2387 ounces to the ton, was made on the 6th inst.), I have broken specimens of the gray oxide of silver, of a richer quality than any hitherto seen; the lode continues much the same as to size, but richer in quality, in a beautiful mineralised ground, interspersed with mica. There is a good branch of silver ore in sight, and it is expected soon to get into a large body. Some of the stones contain native silver.

Silver Valley Mine sample, assayed August 8, 1851, produced 2387 ounces of silver to the ton of ore.—T. L. JENKINS, Callington.

In addition to the discoveries at Oak shaft, above referred to, the lode in Murray's shaft is now cleared, and in a condition to be worked upon, which, having formerly yielded large quantities of silver ore, may also be expected to produce great results. The committee congratulated the shareholders on the prospects of the mine, the discoveries in which had been made at a moderate cost, leaving ample funds for the continued prosecution of the works.

KENMARE AND WEST OF IRELAND COPPER AND SILVER-LEAD MINING COMPANY.

The half-yearly meeting of shareholders was held at the offices of the company on Wednesday, the 20th instant,

GEORGE THOMAS BRAINE, Esq., in the chair.

Mr. J. REYNOLDS GWATKIN (acting secretary) read the notice convening the meeting from the *Mining Journal*.

The CHAIRMAN stated that the meeting had been convened, so far as it was practicable, under the provisions of the Deed of Settlement; and though not strictly in accordance with its demands, the peculiar circumstances of the case would, it was hoped, remove any objections as to its irregularity. By clause 7, the calling of ordinary meetings was provided for to be held on the 31st Jan. and 31st July in every year, or within a fortnight of either of those days. The 38th and 39th clauses bear on this subject, and under these circumstances the directors ordered the issue of the advertisement calling the meeting. The fact was, the provisional secretary had been confined by illness, and having nothing of very great importance to bring forward, they had been induced to delay the meeting thus far. Before having the report of the directors read, he would first read a paragraph from the *Mining Journal*, which had come under his notice.—[The paragraph being read, he continued.]—It was entirely a misconception on the part of the writer. Certainly all matters of any moment had chiefly been left to one member of the board, in consequence of his having an office in the same house, and he having more spare time, took the executive management upon himself, he consulting the other members of the board daily, and letting them know what he proposed to do before carrying it into execution, and they approved of all he had done most fully. The provisional secretary had resigned; being a solicitor, it was never contemplated that he would longer retain such office. With regard to the paragraph respecting the "derangement of affairs at home," there was no such thing existing, except it were in the head of the writer of the paragraph before alluded to. The directors intended to give their services to the company free of any remuneration, until such time as they were enabled to declare a dividend. He (the chairman) would now request the report of the directors might be read.

Mr. GWATKIN accordingly read the following report:—

The object of the directors in calling you together is to fulfil the acquirements of the Deed of Settlement, and to furnish you with such information connected with the operations and present prospects of the mine as have been from time to time supplied since the last meeting, held on the 26th June, somewhat less than two months ago; and although on that occasion much information was communicated in the report then read by your secretary, showing what steps were in contemplation, and had already been taken to commence effective operations at the mines, and what promises might be realised, based on the then indications, as also on the reports from the several persons who were charged to inspect and conduct the necessary preliminary measures for developing the resources of your property, it will be borne in mind that that information (seemingly more copious, yet not more important than that which may now be laid before you) was calculated to raise very sanguine expectations of the future results to be looked for, by the assurance that every effort should be directed to the most expeditious and economical working of the mines. The subsequent correspondence and reports will show that your directors have not been slack in their endeavours to advance your interests, and that they have, so far as they could, redeemed their pledge by repeatedly urging the agents on the mines to use all diligence in the prosecution of their work, and by the immediate supply of the necessary materials for carrying on the same; and in view of all the information obtained, they see no reason to look for the disappointment of those expectations.

The reports from Capt. W. Thomas, which are on the table, will show what has since been done, and what is the present state up to the latest obtainable intelligence from Kenmare—and in order that no ex parte statement of the capabilities or prospects of the mine should be presented to you, but rather that the fullest and most impartial account should be obtained, Capt. C. Thomas, of Cornwall, whose mining experience and character are unquestionable, was engaged by your directors personally to inspect and report on the mines. This he has done, and his report bears evidence of the care and impartiality with which he conducted his examination and discharged his mission.

The information conveyed in the course of correspondence from Capt. W. Thomas will present his occasional observations suggested from time to time in course of working. In a letter of July 3 he writes that "we have found the bottom of one of the 'old workings' on Forge lode, and there is rich copper ore in it, but there is more rubbish to clear out, and I hope by the end of the week to be able to furnish you further information respecting this interesting spot. You may rely on our straining every nerve in order to serve the interests of the company and develope the resources of the mine with the least possible expense and delay. On the 17th, just after the inspection, in conjunction with Captain C. Thomas, he says—"There is a change and an improvement in the rise in the back of the 27 fm. level, and also in the 27 end west. The stope in the back of the 36, east of Croker's shaft, produces ore of good quality. The whim is at work on Forge lode, near Clontoo, and the water is being gradually drained. The lode in Campbell's shaft is much the same as when last reported on. Capt. C. Thomas takes eight specimens of the ore, and I should much like to have it analysed. Should you wish to have a larger sample I will send you a box of it. The lode in Moody's shaft is much the same as it was." The samples were analysed, and are considered worth 30*l.* per ton, as may be more fully shown by the calculations of Capt. Wm. and Charles Thomas and the assay, all of which are before you. In his letter of the 26th July he recommends the importance of having a dialling plan; also urged by Capt. Charles Thomas as indispensable.

The reports from the mines and all necessary information connected with the company can at all times be had by reference to the office of the company, and in no case has any information been withheld from any person properly seeking it.

At the earnest solicitation of several large shareholders, who urged upon your directors the employment of some of the spare funds at the bankers, 6000*l.* were invested at 4 per cent., on the most undoubted staple in the London Docks, with a marginal security of 60 per cent. It being, however, discovered, that the deed unfortunately made no provision for such investment, the loan has been repaid by the firm who borrowed it. It will be an object of early solicitude with your directors to seek for some safe investment, in conformity with the deed, for the now unemployed funds of the company.

Your directors have much reason to be satisfied with Captain Wm. Thomas and Mr. Croker, at the mines; and they doubt not that the result of their exertion will, at no distant period, be developed by the shipment of the ore, which is now in course of dressing. Up to the date 30th June the disbursements of the company at the mines amount to 342*l.* 11s. 7d., as per accounts and books laid on the table; and until a dividend be declared it is not the intention of your directors to charge the company for their services.

In the last report from Captain Wm. Thomas, dated 16th August, and received yesterday, bringing up information and proceedings on the mines to the last date, and entering very fully into details, after a careful underground examination of every part of the mines on that day, he says that "we have dressed 10 tons, and in the course of the year may glean up 40 tons; but I expect that, until we are in a position to sink Croker's shaft and open new ground, I should only be deceiving you if I promised regular sales of ore." He concludes with this observation—"If you will have patience to see the mine properly worked, it is my opinion that a fair profit will be realised on the capital invested." This, you will not fail to observe, is the bare produce of superficial operations in progress of clearing to the main bodies of the lodes; and when this is accomplished, and Croker's and the other shafts fairly entered, it is not unreasonable to expect that much larger results may be fairly looked for.

The reading of the report appeared to give general satisfaction.

The miners' reports, correspondence, and balance-sheet, were laid on the table for the inspection of the meeting, as also the assay ticket of Mr. J. Mitchell, and a letter from Capt. Wm. Thomas, relating to the value of the ore, which stated that he had 10 tons at surface, and expected 40 tons more while engaged in clearing up the old workings.

Balance-Sheet, up to the 30th of June last.

Proprietors capital, 15,010 shares, at £1 each	£15,010	0	0
Creditors, per statement	355	13	2—15,365 13 2
Balance at the bankers	2,772	14	4
Amount on loan, per statement	6,001	15	8
Property at Kenmare	5,040	14	11
Preliminary expenses, travelling, law charges, &c.	1,207	16	8
Mining expenses for April, May, and June	342	11	7—15,365 13 2

The assay made by Mr. John Mitchell, of Kentish Town, of the ore brought to London by Capt Chas. Thomas, yielded 36 per cent. for copper, and 21 ozs. 4 dwts. 16 grs. silver per ton, of 20 cwts.—estimated to be worth from 33*l.* to 34*l.* per ton.

Mr. SWABY inquired as to the investment of part of the company's funds?—The CHAIRMAN replied, that they had a large balance at the bankers, and wished to invest part of it upon security; but the Deed at present, he feared, limited their power to do so, except in Consols or Government funds—Exchequer bills, perhaps, would be better; this was a matter, however, that the directors had under consideration.

A SHAREHOLDER remarked that Consols were too fluctuating, and there might be suddenly a drop of 10 per cent.—great caution was necessary.

Mr. RICHARDSON inquired whether they were raising ore enough to pay the current expenditure?—The CHAIRMAN could not vouch for that; the assay made led them to expect they had 320*l.* worth of ore against 342*l.* 11s. 7d., the expenditure at the mines; but Capt. W. Thomas would not promise continued samplings until the mine was wrought to a deeper level.

Mr. SWABY then moved that the report and accounts be received and adopted, which was seconded by Mr. LOWE, and carried unanimously.

Mr. SWABY considered that the shareholders generally were greatly indebted to the directors for bringing such a promising undertaking before their notice; he felt satisfied, that if they would continue together in unanimity, and hold it as a permanent investment, there was not a doubt but that the mine would most amply reward them.—Mr. RICHARDSON proposed a vote of thanks to the chairman and directors, which, being seconded by Mr. CAMERON, was carried unanimously, and the meeting separated.

BRAICH GOCH SLATE AND SLAB QUARRIES.—These quarries (advertised in another part of our Journal, and to which we have before alluded) have, we are informed, been well responded to by the public, and the managers have fixed the 30th inst. for closing the applications for shares. We have received a return from the manager of the last three months' work done at the quarries, by which it appears 53,400 slates have been made, upwards of 25,000 of which are duchesses 24×12, and countesses 20×10, in the whole equal to 115 tons; and this independent of slabs, and continuing the opening to further bargains. Our attention has also been called to an important feature relative to this property—the lease having a term of 43 years unexpired, and the lessees the privilege to erect buildings for overseers, and cottages for workmen, &c.; and the fact of having nearly all the materials on the spot, the buildings can be erected at a trifling outlay—the managers feeling certain of realising, by so doing, an additional interest of at least 20 per cent., besides the benefit of securing at all times good workmen; for it is a well-known fact that workmen, at many quarries, have frequently to walk 8 or 10 miles to their daily labour.

WHEAL MONTAGU TIN MINE.—This sett is situate in the parish of Towednack, near St. Ives, Cornwall, in the immediate vicinity of Reeth Consols, Wheal Reeth, Wheal Margaret, Wheal Mary, and St. Ives Consols tin mines; it extends 600 fms. on the course of the lodes, 200 fms. from north to south, and is held under the Cleveland family, at 1-18th dues. One of the principal well-defined lodes has been worked on from surface by the ancients to a depth of from 25 to 30 ft., where they were stopped by the water. In clearing up an old shaft it was found only 25 ft. deep, with indications of having given great returns at that shallow depth; as a specimen, the lode was worked on and produced 16*l.* worth of tin per fm. This discovery was made by Capt. Northey, who inspected the mine while travelling through the country into Wales, and to whom has since been presented a silver snuff-box, with the following inscription:—"Presented to Captain Robert Northey by the adventurers in Wheal Montagu. Cornwall, July 29, 1851." The mine is divided into 512 shares, and the indications are considered of the most promising character.

GREAT WHEAL DIAMOND COPPER MINING COMPANY.—This sett is situate in the parish of Stoke Climsland, in the county of Cornwall, extending 460 fms. on the course of the lodes from east to west, and 500 fms. from north to south. It adjoins the Great Sheba and Lamherooe Wheal Maria; and in a joint report from Mr. Jehu Hitchins and Capt. James Carpenter, those gentlemen express an opinion that there is not a doubt but the lodes are those now worked on in Devon Great Consols. There is a great mundic lode in the sett, from 6 to 11 ft. wide, which has been wrought on down to 50 fms. from surface, from which several hundred tons of copper ore have been sold; and according to the rules which have guided the Cornish miner for generations past, as the shaft goes deeper the copper ore will increase and the mundic diminish. A cross-cut is now being driven at the deep adit to intersect a gossan lode seen at surface, which will also enable the agents to decide the best point for an engine and machinery for fully developing the mine, and there is a powerful stream of water applicable to working and dressing purposes. The mine is divided into 10,000 shares at 1*l.* each, on which a deposit of 10s. is to be paid, which is expected to prove amply sufficient for bringing the mine into productive working.

SHARP TOR COPPER MINING ASSOCIATION.—This sett, situate in the parish of Linkinhorne, is 300 fms. on the course of the lodes from east to west, and 150 fms. from north to south, at the point of junction of the granite and clay-slate ranges. It is in the immediate vicinity of the Caradons, and immediately adjoining the Phœnix Mines, known to have been so highly productive, the strata of which are exactly similar to the Sharp Tor. A small party of adventurers have erected an engine and machinery, with the necessary buildings; and having opened on a large lode, from 20 to 30 ft. big, of undoubted promise, and ascertained that the sett is worthy of vigorous development, they now propose to divide the mine into 6144 shares of 2*l.* each, 3072 to be allotted on application, 3000*l.* of which to be appropriated as working capital, which is deemed quite ample to place the mine in a dividend-paying state. Reports from Capts. J. Richards and Rodda, and Mr. Jehu Hitchins, fully bear out the statements made in the prospectus. The principal shaft is down 37 fms., which Capt. Richards recommends to be sunk with all the force which can be brought to bear upon it; when he has no doubt, at greater depth, this mine will become equally productive as Wheal Maria, the great lode of which, Mr. Hitchins says, runs through the sett.

MINERAL WEALTH OF FLINTSHIRE.—A correspondent requests us to draw attention to the unexplored mineral wealth of the county of Flint, particularly an extensive district around Mold. While he admits he is anxious to see employment provided for a large population of miners, he states, as his own personal knowledge, that there are not only many old works which would repay for re-opening, but much virgin mineral ground to be had at a low cost, which would make ample returns for any reasonable outlay. Want of capital appears to be a complete bar to mineral development in this county.

CHYPRASE CONSOLS.—From the forward state of the engine there is but little doubt that it will be in full course of working on Tuesday or Wednesday next, a few hours will then suffice for forking the water to the bottom of the shaft. We have set the shaft to 12 men or more, as may be required, to sink the 23 to the 40 fm. level, where there was such an excellent course of tin at last working: they have taken it at 150*l.*, to sink, case, and divide shaft, make good footway, fix pumps and clacks, cistern, and cut a plat 14 feet long, 10 ft. wide, and 7 ft. high, in the 40 fm. level, all complete, and to work from two o'clock on Monday morning till 10 o'clock on Saturday night.

RUNNAFORD COOMBE MINE.—From the captain's report of the 20th inst., it seems that the adventurers may soon expect a profitable return for their investments. After remarking that what he had often promised the shareholders had come true, he says—"The men have opened a 'pass' and run it down, have found the lode, and are breaking as rich a pile of tinstuff as I ever saw; the specimens are excellent. The smith and three men besides are at it, and soon I hope to put the stamps to work again." He at the same time recommends the sale of the steam-engine, as he appears to consider the water-wheel sufficient for every purpose.

ACCIDENTS.

Ballerwidden Mine.—As some boys were playing in the engine-house, riding up and down on the bob as the engine made her stroke, one was seriously injured upon the face and head.

Wheal Mary Ann.—Robert Julyan was killed by the falling of a scale of ground. Several companions luckily escaped by running.

Wheal Carne, St. Just.—Edward James met with his death by coming in contact with the crank of the engine, which broke his jaw-bone and crushed his chest.

Clay Cross.—J. Clarke was killed, and three companions seriously injured, by an explosion of fire-damp in a pit belonging to the Clay Cross Company—to whom no blame could be attached, as the men disobeyed the precautions taken for their safety, and by their own carelessness caused the ignition.

Sunderland.—A dreadful explosion of fire-damp took place at the Washington Colliery, on Monday last, about two miles from the station of that name on the York, Newcastle, and Berwick Railway, which has resulted in the death of near 40 individuals in the prime of manhood. About 60 men went down about 5 o'clock in the evening, and at 11 at night the neighbourhood was alarmed by a dreadful explosion, when numbers of persons ran to the spot to render assistance, but, alas, without avail. The first two heroic men who descended were brought up insensible, and one eventually died, the other being still in a very precarious state, and it was 7 o'clock the next evening before 30 bodies were extricated, 10 more then, as was supposed, remaining in the pit. The colliery is said to have been badly ventilated, but the facts will be learned at the coroner's inquiry, which is adjourned to Wednesday next. Some further details will be found in another column.

Hanley Potteries.—Another awfully fatal explosion of fire-damp took place at the Uberley Collieries, belonging to John Ridgway, Esq., on Monday morning last, when seven men and boys were instantaneously killed. It appears that, about seven o'clock, Ralph Hancock, the butty, descended the mine, accompanied by E. Forrester, G. Sumner, W. Hopkins, T. Jones, G. Mountford, and a boy, J. Goodfellow. Hancock alone had a safety lamp, the others all naked candles, and they had not proceeded above 60 yards before a terrific explosion took place, which perfectly paralysed for a time the men in other parts of the workings, and was heard and felt in the adjoining pits. It was some hours before any one could enter that part of the colliery, and four men, who first tried, were drawn out insensible from the effects of the after-damp. By twelve o'clock the whole seven bodies were got out in a frightfully mutilated state, and more injured by the concussion than by actual burning; one man had his arm blown completely off.

Moxley.—R. Cox was killed by a fall of coal at Mr. W. Baldwin's colliery.

Wolverhampton.—M. Dolby was killed while working at the Swan Garden Works.

Kingswinford.—D. Griffin was killed by a fall of coal in Mr. Firmstone's colliery.

Durham.—W. Gilmore was crushed to death at the Halfway-house Quarry by the travelling crane swinging against him.

Cwmbran Colliery.—Wm. Edwards was crushed to death by the trams, which rapidly descended the incline through the breaking of the chain.

Whitehaven.—W. Fox was killed by a blast in Lord Burlington's Kirkby Ireleth Quarry.

Darlaston.—R. Cox was killed by a fall of coal in Mr. Baldwin's pit.

Wordsley.—Daniel Griffin was killed by a fall of coal in a pit belonging to Mr. Firmstone, at Nager's-field.

Westhoughton.—R. Crompton was killed at Mr. Hulton's Rushfield Colliery, by a portion of the roof falling on him.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—We hope in the present week to make Field's engine-shaft complete for drawing to the 90 fm. level. The water appears to be sinking in the winze under the 80 fm. level; we hope soon to resume the sinking this winze. The lode in the 80 east is worth 50*l.* per fm. No. 2 winze is communicated with the 80, and the men put to sink the boundary winze under the 70; the lode here is 5 ft. wide, worth from 50*l.* to 70*l.* per fm. for copper ore. The lode in the 70, at Wyld's shaft, is worth 70*l.* per fm. We commenced to drive the 60 west of Field's engine-shaft; the lode here is about 3 ft. wide, being capels, spar, and mundic. No change to notice in any other part of these mines.

BARGALLY.—We have not made much progress in driving the level during the last week. Some of our miners have left their bargains unfinished, and will require to be brought back to work them out: the ground in the level is not much altered, excepting in some places, where we meet with some nice stones of ore. In driving the new cross-cut to the shaft we have cut through about 10 feet of very fine orey ground, which is all saved; the lode is very strong, and likely to be a productive mine at no great depth from surface.

BAT HOLES.—The engine-shaft is now down 8 fms. 2 ft. below the 48 fm. level—ground hard for sinking towards a purposed 60 fm. level; our reason for this is, the Cornish lode is not quite gone out of the shaft, from whence issues a great deal of water; we should, therefore, sink entirely through before cross-cutting to the Wood lode, which underlays 3 ft. in a fathom towards the shaft, and thus it will shorten the cross-cut. The junction of this lode will be about the 70. The Wood lode in the 48 north will yield 7 cwts. of lead ore per fm., and has a promising appearance for improvement; in the south it is 6 ft. wide, opening ground that will set at a high tribute as soon as we can convey the stuff to surface by way of the winding-engine, the heavy parts of which have arrived upon the mine, and put together. The shallow adit end, on California lode, is worth 6*l.* per fm. for lead ore, and has a very promising appearance.

BRYN-ARIAN.—The 20 fm. level, driving west from engine-shaft, is in a lode 6 ft. wide, and at present will yield about 10 cwts. of ore per fm.; the stope in the back of this level, west of the shaft, will produce from 8 to 10 cwts. per fm.; a stope in the back of the same level, west of Hughes's winze, will produce a ton of ore per cubic fm.: the lode is 18 ft. wide. The 20 fm. level, driving south from Hallett's shaft, is suspended, and the men are making preparations to sink the engine-shaft under this level; the lode in the same level, driving north, is much the same as last reported, yielding 1½ ton of ore per fm. We shall sample 20 tons of ore by Friday (22d inst.), and hope to get it on board the vessel by the following Tuesday.

BUTTERDON.—The lode in the north end at the 40 fm. level is 4 ft. wide, producing good stones of ore; in the south end in this level the lode is 3½ ft. wide, producing also some very fine stones of ore; we have about 2 fms. more to drive this end to intersect the slide, and when we get through it, as I have before observed, I fully expect a great improvement, as was the case in the 30. In the 30 end north the lode is 4½ ft. wide, orey throughout; and the south end in this level is opening paying ground. On the whole, the mine looks very promising to turn out well.

CARTHEW CONSOLS.—The lode in the north end, in the 95 fm. level, has not changed its appearance very materially since my last report, but in driving south in this level we find it to be widening, and of an improved character, yielding some lead and copper. The lode in the 85 fm. level end north shows much more of lead and less of copper than lately noticed, and is looking very well. In the west end, 75 fm. level, we have intersected a north and south branch of a very promising appearance, and we anticipate being in near approach of the north and south lode, which we know to be in this direction; in the 75 fm. level end south the lode has much improved this week—this is now a very promising end. The lode in the 65 fm. level end south is looking exceedingly well, and producing a good quantity of lead; the rise and stopes in the back of this level are looking no less satisfactory, and the tribute pitches hold out very good encouragement from their productions of lead and copper, which, together, give the mine a very pleasing feature.—P.S. I would mention that this mine never looked so well before. The lode in the south end, 65 fm. level, continuing so good, as well as in the rise in the back of this level, and in the bottom of the level above (the 48), makes it appear very evident that we are about to realise good returns. The work drawn from these places is very good indeed.

CASSANDRA ANNE.—We have cut a splendid lode here, a better I never saw—it is cut in the field No. 117. Capt. Tratton and Capt. W. Williams have been on the mine with me, and both agents say they never saw a more kindly lode in the back in all their life; it is composed of an abundance of gossan, quartz, felspar, flookan, and is in a splendid mineralised ground of the best strata. I am in hopes our inspecting agent, Capt. W. B. Call, of Whiteford-house, will be here in a few days, when I have no doubt he will send a report to the *Mining Journal*. I am now taking up some gossan &c., to forward to him for his inspection.

DEVON AND COURTENAY CONSOLS.—Since my last report we have met with a slide in the engine-shaft, which has caused a favourable change in the ground, and which will enable us, if it continues, to proceed with the sinking the engine-shaft more rapidly than before. If this ground continues, I would advise sinking 12 fms. instead of 10 fms. before we drive the next level. The lode in the 60 end west is rather improved; it is producing a little ore, but not enough to save. We are progressing favourably with the northern engine-shaft. In our tribute department, the men who took the pitch in the back of the 60 have turned out unfavourable, and yesterday I stopped the pitch, until we can get more able hands to work it. We are also progressing favourably with the water-wheel, &c.; the socket and arms are fixed, and to-morrow we shall commence to put on the segments, and nothing shall be wanting on my part to put the wheel to work on the day of our next general meeting.

EAST CROWNDALE.—The north lode, in the 58 west, is of a promising character, lode 2 ft. wide, producing mundic and copper; in the same level east it is 16 in. wide, orey throughout; in the same level west, on south lode, the ground is more favourable for driving—lode large, producing spots of copper. The 47 west, on north lode, is at present poor.

EAST SHARP TOR.—Hitchins's engine-shaft is now 39 fms. 5 ft. below the surface, the ground in which is not quite so favourable for sinking as when last reported on; set, on Saturday last, 1 fm., at 16*l.*, which will probably occupy 11 days from this time, when we shall commence cross-cutting the lode east of the shaft, which will be cutting the plat at the same time.

EAST WHEAL GEORGE.—The lode in the 23 east is 18 in. wide, composed of capel, mundic, and spots of ore. The rise in the back west is communicated to the winze in the bottom of the 12; consequently we shall resume driving on the 18th inst. The stopes in the bottom of the 12 are worth from 10*l.* to 12*l.* per fm.

EAST WHEAL RASHLEIGH.—The lode in the end still holds its former character, with an increase of lead in it. We are saving the best of the work for dressing; it is enlarging in size every fathom we drive—being now 4 ft. big, and strongly impregnated with mundic. We have cut a large stream of water in the end, which I have no doubt is from another lode we shall cut shortly. We are getting on as fast as possible with the shaft. I do not wish to appear too sanguine as to future results; but I feel confident of success after an efficient trial.

ESGAIR LLEE.—We have extended east on the caunter lode 3 fms., and are rising against the winze—now up 3 ft.; the lode in both has a very promising appearance, producing first-quality gossan and mundic, with a good mixture of ore: it is 2 ft. wide, yielding half a ton of ore per fm. We expect to communicate the winze to the deep adit in the course of the week, which will thoroughly ventilate the mine to its eastern extremity, after which we may drive west of cross-cut, as well as stope east and west. I think we should at once commence the erection of a drawing machine, and attach it to our present pumping and crushing wheel, which is of ample power to perform its three duties.

GREAT POLGOOTH.—The lode in the 96, east of Clarke's, is further improved, and is producing some good tinstuff. The lode in the 36, at Coad's, is not yet cut through, but the quality is improving, which shows that the best part is to the south; and the discovery of this lode is likely to be of considerable importance. In the report of the 26th July, we mentioned we had just sold a parcel of tin, value about 826*l.*; we have since sold in addition—tin, 1027*l.* 13s. 7d.; and arsenic and mundic, about 105*l.*: together, 1958*l.* 13s. 7d.

GREAT WHEAL BADDERN.—The 51 end is without alteration, except a greater discharge of water; the stopes in the back are producing moderately. The 40 end has been passing through peculiar ground, and rather unproductive; the stopes in the back, at Buckley's and Tweedale's shaft, are not quite so good. In the 30 fm. level end, lode 8 in. wide, producing rich lead—this is an improvement; the stopes and operations in the back are much the same. The 20 end is less productive. The stopes in the back, east and west of Burgen's, are yielding satisfactorily. A new lode not yet cut in the cross-cut south. We shall be in a position to commence cross-cutting at each of our deeper levels. We have been obliged to suspend sinking of Burgan's shaft, on account of water; we must wait about six weeks longer, until the 40 end reaches perpendicularly under the said shaft, when it will be thoroughly drained. The adit end on the old lode has shown better appearances this week. Dressing operations are rather behind; however, we purpose sampling this week from 40 to 50 tons of lead. We sold, August 19, 27 tons 15½ cwts. of black jack.

HEIGNSTON DOWN CONSOLS.—The lode east and west of Doidge's winze, in the 55 fm. level, will produce 6 tons of ore per fm. The 45 is suspended, and the men put to rise against Eastman's winze, sinking below the 35, for the better ventilation of both places. Victor's winze, sinking below the 45, progresses satisfactorily, but no lode has been taken down since its commencement. The 35, east from cross-cut, on the south lode, contains a little ore, but not rich. The stopes in the back of the 35, east and west of Biscumbe's rise, looks well. No lode taken down in Hitchins's shaft. The lode in the 35 west is 2½ ft. wide, producing occasionally good stones of grey and yellow copper ore, altogether very kindly.

HOLMBUSH.—The ground in Hitchins's and Wall's engine-shafts, sinking below the 132 and 100 fm. levels, is still favourable. The 132 south is 10 ft. wide, quartz, prian, flookan, and stones of lead scattered throughout, requiring the dressing process. The lode in the stopes will produce 2 tons of copper ore per fm., back and bottom; east of diagonal shaft it is 1 ft. wide, producing 1 ton of ore per fm. The flap-jack lode in the 120, east of the great cross-course, is 20 in. wide, spar, mundic, and stones of ore. The lode in the 110 east yields 2 tons of ore per fm. The 100 east 1½ tons of ore per fm. West of Wall's shaft it is 4 ft. wide, mundic, spar, blende, and stones of copper ore, opening tribute ground. We are rising over the 132 on the lead lode, and sinking below the 120, to hole as quickly as we can.

KESWICK.—At Brandley, the 20 fm. north is looking better than it has been—worth 30 cwts. ore to the fm. Lynn's rise is not quite so good—worth, on the average, about 12 cwts. ore per fm. In the 20 fm. south the vein is increasing in strength, and looks very promising; we have a fine rib of jack, with a little ore. The ground in the engine-shaft is favourable, and we expect to be down by the end of the month. In the salt sump the ground is easier—worth about 15 cwts. ore to the fm. At Thornthwaite six men are driving to cut the orey ground. In the 17 fm. level we have a tribute pitch. We have abandoned all workings in the sole of the 27 till we tap the vein in the 37.

KIRKCUDBRIGHTSHIRE.—At Steward's shaft, in the 86 west, the lode is 3 ft. wide, with a good mixture of ore coming in it. In the 74 west the lode is 3 ft. wide, with good stones of ore. At Gilpin's shaft, the lode in the 74 east is 4 ft. wide, with jack and carbonate of lime, very kindly; in the same level west the lode is 3 to 4 ft. wide, with a good rib of ore, yielding 7 cwts. of lead ore to the fm. In the 62 fm. level west the lode is 3 ft. wide, yielding 6 cwts. of lead per fm. In the 50 fm. level west we have a kindly lode, yielding half a ton of lead to the fm. In the 40 west the lode is 2½ ft. wide, with jack and spar. We have engaged another vessel for a cargo of lead, which will be put on board as soon as possible after her arrival.

LYDFORD CONSOLS.—*August* 18.—At Wheal Mary, the lode in the adit level, south of the gossan shaft, is not quite so large as it was; it is, nevertheless, a very kindly lode, being composed of quartz, mundic, spots of lead, and good quality copper ore. We have opened upon the Fanny lode about 450 fms., and for this length it presents a very flattering appearance, being of very large size, and composed of gossan, quartz, prian, &c. We intend driving upon the course of this lode from Kenworthy bottom towards Wheal Fanny, and shall get a good back by driving a short distance, and by continuing the level until under the highest part of the hill we shall be at a depth of 24 fms. from surface. At Wheal Adventure, the lode in the adit level south is composed of flookan and mundic—a very kindly lode. We completed the wheel-pit on Friday last. On Monday we received some parts of the axle, and are now waiting the arrival of the other parts (which I expected yesterday) for putting together before getting it in the pit; I hope it will be here to-day. We are promised some part of the pitwork this week. The masons are raising the shaft, which will be finished in about a fortnight. We have finished cutting, and have commenced staunching the leats, which will be finished in time for our other work.

— *Aug.* 20.—At Wheal Mary, the lode in the adit level, south of the gossan shaft, is increasing in size, and presenting a very favourable appearance, being composed of quartz, mundic, spots of lead and copper ore. We shall commence driving on the Fanny lode next week. At Wheal Adventure, the lode in the adit level south is large and kindly, being composed of flookan and spots of mundic. We have got the axle on the pit, and shall put some of the arms in to-day or to-morrow, and I hope we shall have no delay whatever from any quarter, when we shall soon be in a position to commence forking the water. We shall, I hope, finish staunching the leats next week.

MERLLYN.—Since the last two-monthly meeting of this mine the whim-shaft has been sunk about 7 fms., averaging about 15*l.* per fathom; the lode at present is not so productive as it has hitherto been, but producing good stones of lead, with indications of a change for the better. The boundary winze has been sunk about 8 fathoms, 4 fms. of which are worth about 12*l.* per fm.; the last 4 fms. have been unproductive, but the present appearance of the lode indicates a change, which, no doubt, will be an improvement. The 26 fm. level has been driven about 10 fms. west of whim-shaft, lode averaging about 15*l.* per fathom; the fore-breast is worth at present about 12*l.* per fm. The 16 fm. level, west of whim-shaft, has been driven about 10 fathoms, intersecting the cross-course, dislocating the lode, and making it comparatively poor, but worth on an average 6*l.* per fm.; the same level, west of engine-shaft, has been driven about 10 fms. west of the cross-cut, lode averaging 20*l.* per fm. The present fore-breast is rather improved, will now produce 2½ tons of lead per fathom. The 15 yard level has been driven about 9 fathoms west of the cross-cut, lode averaging about 18*l.* per fathom. The engine-shaft is sunk about 8 fms. below the 16 fm. level, the ground being now much more favourable for sinking. We shall soon arrive at the 26 fm. level, when, by cross-cutting to the lode, will throw much light on the western ground, so as to enable us to form a more decided opinion as to the lode being productive in depth. On the aggregate of our two last months' working I consider an additional 150 fms. of ore ground has been laid open, which will produce on an average about 1¼ ton of lead ore per fathom; this, added to the ore ground laid open before the last meeting, will leave us upwards of 500 tons of lead ore discovered, and the mine properly cleared and secured, and in a good course of working.

MILL POOL.—At the request of some of the largest shareholders, Captain Mark Reed has inspected this mine, and furnishes the following report:—I have not been underground here since February last, and I am happy to state that the favourable report which I then gave of the mine is fully confirmed by the present appearances. I find the engine-shaft sunk to the 20 fathom level; the level eastward is driven about 30 fms.; the lode averages from 1 to 2 ft. wide, and is now taken away by the tributers at from 5s. 6d. to 9s. 6d. in 1*l.*; the lode in the present end is from 18 to 20 in. wide, and is laying open good tribute ground. The 10 fm. level east has been driven 60 fms. from the shaft, and the backs of this level are working on tribute at an average of 8s. in 1*l.*; the end is still producing good tinstuff. The part of the lode on which I reported in the bottom of the adit, before the engine was erected, is still to the eastward of the 10 end from 15 to 20 fms. I should recommend you pressing the levels eastward, as the lode in that direction in the adit level appears even more promising than in the ground already opened. I find the lode is not productive for tin in the 10 and 20 fm. levels west; but I should advise you by all means to push on these levels, having especial reference to their intersection with the Standard lode. In the 10 fathom level this point has been reached; and although the lode here is not rich, yet, in driving a short distance further, the first of the parallel south lodes will be intersected; and I should judge, from appearances at the adit level, the results will be highly satisfactory. You are aware that the Standard lode is the one which first directed your attention to this sett; and, at my recommendation, you attached a line of flat-rods from the engine to this lode, for the purpose of getting below the workings of the ancient miners. I find this shaft has been sunk 13 fms. below the adit; but, on cutting the lode, nothing but a small arch of ground was found remaining. This shaft is now sinking below this level 10 fms. deeper, at which point I consider the lode will be found in whole ground; and I give it as my opinion that highly-favourable results will be realised below the old workings in the 23 fm. level. From the very extensive excavations made, I should say the lode must have been very rich above. In the course of next month this shaft will reach the lode. I wish to observe, in reference to the engine lode, that a branch of copper ore is running side by side with the tin in the 10 and 20 east. I do not think better stones of ore can be found in this locality; and I have a strong opinion that, before the shaft is sunk 20 fms deeper, you will have from this lode large returns of copper ore. My attention has been directed to the west part of the sett, called Calenso. I find that, by driving on the Standard lode in the 10 west, the water has been drained below the adit, and also below the former workings in this ground. A shaft has has been sunk on the first lode, south of the engine lode, and the lode cut about 5 or 6 fms. below the adit, which is at present the lowest point to which the water has fallen; it is 2½ feet wide, and of a much more promising character than I could have anticipated. It contains good work for copper and tin; and, judging from the old workings, both east and west above the adit, I consider this lode a very valuable auxiliary to your mine. Looking at the concern generally, I cannot but speak of it in the most favourable terms. The utmost economy has been practiced, and the machinery throughout is in good order. I should advise you to resume the sinking of the engine-shaft as soon as the flat-rod shaft has reached the 23, and to continue the present ends with all the vigour possible. Although your returns at present are comparatively small, on account of the scarcity of the surface water, yet I have no doubt, when the wet weather sets in, you will find ample employment for your stamps, and place your mine not only in a position to meet the current expenses, but probably also leave a profit to the adventurers.

NANT-Y-CAR (COPPER).—I have just been underground in the engine-shaft. The cross-cut has been driven 5 fms. 4 ft. 6 in. The lode was intersected after driving a few feet, and found to be 13 feet wide, 7 feet of which appeared in the cross-cut to bear good copper ore. We have driven what shall be in future called the 43 fm. level, nearly 3 fms. east on the hanging side of the lode, taking a level 4 feet wide. It gives me the greatest pleasure to state that the lode proves very rich, and has considerably improved in the short distance driven from the cross-cut: it is natural it should improve so, as the bottoms of the old works are still 27 fms. further east. All the lode taken down is saving work, and that rich, especially the smalls. On the south side of the level the lode left unbroken is as rich as any taken down. I shall not at all be surprised, when the whole of it is taken down, should it yield copper throughout the whole width —13 feet. I have the greatest gratification in stating that Nant-y-Car, of which I have had the superintendence for some time past, is now developed to such an extent as to call for the exclusive attention of an experienced captain for the underground operations alone, without taking into consideration the general management of the mine. You should not lose a day without appointing an underground agent. As, from my other engagements, it is out of my power to pay that full and proper attention to the mine required for realising the riches now discovered, I feel bound to surrender the duties of superintendent to any one who may be appointed to devote his entire time to the works. The discoveries made are of such a nature and extent as to demand additional powers. I can most confidently advise the adventurers that their money will be well laid out. I send you, per to-day's (19th inst.) mail, a box of specimens, broken from the end of the level yesterday. The matrix of the lode is chiefly a decomposed friable carbonate of lime. The only specimen exhibited in the Crystal Palace, the matrix of which is similar, is from the Burra Burra Mines, in Australia. Coupling this with the great body of gossan on the back of the lode, I will repeat what I have privately stated before—"I see no reason why Nant-y-Car will not prove to be another Burra Burra." At present, there are beds of slate running through the lode, but I find the slate decreases as we drive east. In the bottom of the old works the entire lode was carbonate of lime and copper. I expect the whole of it will exhibit the same features in the 43 fathom level; but its extraordinary quality, being different to any other in this country, makes it impossible for me to say what quantities of ore may not be raised. As soon as you have fixed on a proper person, I will take great pleasure in introducing him to the mine, and giving him all the assistance in my power.

PETER TAVY AND MARY TAVY CONSOLS.—Since my last report the 43 fm. level, west of shaft, is let to six men, at 9*l.* per fm.; lode about 2 ft. wide, the north part of which is yielding fair work for tin; the 43 fm. level, east of shaft, is let to six men, at 12*l.* 12s. per fm.; the lode in this level is about 18 in. wide, carrying a leader of tin 7 in. wide on the south wall—this is work of excellent quality. The wheel is finished; the carpenters are engaged in preparing the wood-work for the stamps. The stamps' axle was delivered at the mine to-day.

RIX HILL.—The lode in the 50, east of the middle shaft, is of a promising character, but poor for tin. No lode has been taken down in the shaft since my last: we have broken the sinking windbore, and had to replace it by a new one. The rise west of Tregaskiss's pitch has just cut the floor of tin. I hope in my next to say something more encouraging, after we are through the tin course. The pitch looks well going west. We intend sampling May and June tin ores on the 18th inst.

SOUTH OF SCOTLAND.—We are now making good progress in sinking the south shaft—the ground is kindly, with small spots of ore in it; we are now between the east and west lode, and expect to come upon a branch of ore when we cut the east lode. The stopes are not quite so rich in ore at present. I think the next stope will do better, as it improves downward.

SOUTH TRELAWNY.—The cross-cut west in the 60 is driving by six men, ground hard and sparry for cutting in, rather more mundic than before. We shall extend the level on the eastern part of the boundary, to see if any more lode should exist in that quarter.

TAMAR SILVER-LEAD.—Spurgin's shaft is sunk 11 fms. 5 ft. below the 160 fm. level—ground favourable for sinking. We shall push on till we arrive at the 175, in order to do away with Walker's lift. We shall carry the lode when driving north to communicate with the 175 from old engine-shaft. The 80, in the north mine, is very much improved this week; we are getting through the hard bar of ground in the end, and, from every appearance, we shall have more ore shortly from this mine.

TREDDOL (COPPER AND LEAD).—A cross-cut is driven 22½ fms., which has intersected the lode, and a level driven on the course of it 32 fathoms. The first 15 fms. has passed through a large lode, varying from 7 to 9 ft. wide, with a very promising appearance, composed of copper, quartz, and lead ore, mixed with clay-slate; the last 17 fms. is composed of blende and lead ore to the width of 4 in. The shaft sunk below this level is 8 fms. deep. The copper ore has been assayed, and yields a value of 8*l.* 13s. per ton.

TRELAWNY.—At Trelawny's shaft we have cut the capels of the lode in the 107 fm. level cross-cut, and hope by another week to be able to report on the value of the lode. In the 92 end north the lode is 3 feet wide, and worth 8*l.* per fm.; in the south end, at this level, the lode is 2½ ft. wide, and worth 7*l.* per fm. In the 82 end north the lode is 3 ft. wide, and worth 15*l.* per fm. In the 72 end north the lode is 3½ ft. wide, and worth 7*l.* per fm. We have commenced a winze in the bottom of the 82, south of the shaft, where the lode is 3 ft. wide, and worth 9*l.* per fm. At the north mine, in the 78 end, north of Trehane, the lode is 2 ft. wide, and worth 8*l.* per fm. In the 68 end north of ditto, the lode is 2 ft. wide, and worth 4*l.* per fm.; the lode in the 68 end, south of Smith's shaft, is 2 ft. wide, and worth 7*l.* per fm. We shall commence this week to cut the plat, which will prevent us from driving north until it is completed; the stopes are without alteration. In the 55 end, north of Smith's shaft, the lode is 1½ foot wide, and worth 4*l.* per fm., and good ground for driving.

TRELEIGH CONSOLS.—Christoe Lode: In the 100 fathom level, west of Garden's, the lode is 18 in. wide, with stones of ore. In the 90, west of ditto, the lode is 2½ ft. wide, worth 36*l.* per fm.; the winze below this level we have suspended for the present, as there is too much water for sinking; in the stopes above this level, west of Terril's winze, the lode is 2 ft. wide, worth 30*l.* per fm.; ditto, west of Harrie's winze, the lode is 18 in. wide, worth 12*l.* per fm. In the 80 fm. level, west of Gardens, the lode is 18 in. wide, with stones of ore; in the same level, east of Christoe, the lode is 20 fms. wide, with good stones of ore.—Parent Lode: In the 64 cross-cut, north of Parent shaft, we are driving to cut the Middle lode. In the 30, east of ditto, the lode is 18 in. wide, with but little ore.—Middle Lode: At Burgess shaft, below the 13 fm. level, the lode is 15 in. wide, with good stones of ore.

TRELOWETH.—The lode in Harrison's shaft is not improved for copper ore since my last. The 32 end is gradually improving. The 45 cross-cut is in hard ground. The engine-shaft is sunk 3½ ft. since my last.

TREVILLE (SILVER-LEAD).—We have not made much progress in driving the 22 fm. level since last report, in consequence of two of the men being on the sick list, and the shaft being occupied by the pitmen fixing lifts, &c. I did not measure the end, but think they have driven about 5 ft. The only alteration in the lode is, that there is more spar and mundic; there is copper all through the lode, and pieces of beautiful silver mundic, 6 or 7 lbs. weight. I have been expecting daily to be in a good course of lead ore. The shaftmen are getting on very well with their work; I hope we shall be ready to recommence sinking in a week from this time.

UNITY CONSOLS.—At Gray's engine-shaft, the sumpmen have been busily engaged during the last three days dividing and casing the engine-shaft from the 50 to the 60, and have commenced sinking below the 60; the ground appears to be favourable, and no time shall be lost in getting down to the 70. In the 60, east of the engine-shaft, the lode in the end is 2½ ft. wide; on the north side is a leader of grey ore, 14 in. wide; and the remaining, on the south side, is very superior, and rich for tin—worth, altogether, for tin and copper, 30*l.* per fm.; in the same level, west of engine-shaft, the lode is about 3 feet wide, containing tin and copper even superior to the eastern end, and worth 40*l.* per fm. A sample of the tin was forwarded to you on the 16th inst., of the very best quality. In the 50 fm. level, west of engine-shaft, the lode is 20 in. wide, with very little variation from last week's report, and producing a little black and grey ore; the winze in the bottom of the 50, west of engine-shaft, is down about 2 fathoms—lode 3 feet wide, producing 3 tons of copper ore per fm. In the 30, east of Buckley's, the lode is considerably improved since last week—lode 3 feet wide, producing tin and copper ore, worth 7*l.* per fathom. The 43 end going east, at Kenworthy's engine-shaft, at Lambo, has rather declined since last week's report—lode now about 20 inches wide, producing good copper ore; and, although this end is not looking quite so encouraging as last week, still there is nothing to warrant any apprehension of a discouraging nature. The sink in the bottom of the 30, east of Tweedale's, we have been obliged to abandon for a short time in consequence of the water, but hope soon to extend the 40 further east, when we shall get under this sink to drive it, and shall be enabled to rise or sink at this point at our pleasure; the cross-cut in the 30, and towards Hampton's lode, is still progressing, and when we cut that much-to-be-desired object, you shall have immediate information of it. The castings for the stamps' axle were delivered on the mine on Saturday last, and I hope to have the stamps in full work in about a fortnight. We have been busily engaged to-day (18th inst.) preparing the parcels of ore for the sampling, which will take place to-morrow.

WEST BEAM.—The engine-shaft is now down about 11 fms.; but in consequence of the increase of water it cannot be sunk any deeper by manual labour alone; it is timbered, cased, and divided to the bottom. We have fixed the horse-whim, and intend sinking, if we can, about 3 fms. deeper, and opening on the lode, before the engine goes to work. The part of the lode in the shaft is producing good tin, and the general appearances of it continues very favourable. The masons have nearly completed the engine-house, and the carpenters will soon prepare for the engineers to heave in their work.

WEST GOGINAN.—The engine-shaft is now down 26 fms. 1 ft. from surface. The lode is large, composed principally of killas, mixed with spar, black-jack, and at times small branches of ore. The lode in the deep adit level, driving east from the old shaft, is 5 ft. wide, and spotted with lead ore. The wheel is completed, and we have commenced fixing the rods and bobs.

WEST PHŒNIX.—The engine-shaft is down 12 fms. 4 ft.; the ground is a little more favourable for sinking. The men are working with spirit, and getting good wages. The engine and pitwork are likewise working satisfactorily. All the other operations are getting on well.

WEST POLGOOTH.—The water at Hancock's shaft is now in fork to the 14 fm. level. This level is driven about 50 fms. to the east of the said shaft on the course of a lode 2 ft. wide, producing very good stones of tin (a sample of which can be seen at the office), but this is not the main lode; I should say we shall find it from 6 to 8 fms. to the north of Hancock's shaft. The principal part of the water appears to be coming from the west of the said shaft. In consequence of the old men losing so much level, we cannot get back to see how it looks in that part of the mine; for this purpose we shall sink Hancock's shaft, and stope the bottom of the level on the course of this lode. We are now clearing up one of the old men's shafts; this will ventilate, and serve as a whim-shaft. I hope by the end of next week to see this effected.

WEST WHEAL JEWEL.—The 85, west of Williams's cross-course, on Wheal Jewel lode, has not been taken down in the past week. In the 42, west of Quarry shaft, on Tolcarne tin lode, we have intersected Hodge's cross-course—lode home to cross-course, worth 18*l.* per fm. In the 57 west the lode is looking more promising; same level east the lode is producing stones of tin. Quarry shaft, sinking below the 42, is worth 6*l.* per fm. The two pitches working on tribute, west of Tregoning's shaft, in the bottom of the shallow adit, are worth 10*l.* per fm. each. The stopes in the bottom of the 12, west of Tregoning's winze, on the same lode, are worth 15*l.* per fathom.

WEST WHEAL RUSSELL.—We have commenced driving the cross-cut south to the lode in the 60 fm. level, which is now in from shaft about 4 ft., where a rich branch of copper ore has been intersected, which looks well for the north lode. No lode has been taken down in the 37 fm. level west since last reported; in the rise in the back of this level the lode is still large, but not quite so rich as when last taken down. No lode has been taken down in the 48 fm. level during the past week, but intend cutting into this, and also the 37, next week. In the shaft sinking to the west of the river the lode has a very kindly appearance, being from 4 to 5 ft. wide, composed of strong capels, and gossan, with a leader of rich looking black and yellow copper ore, which is considered of no little promise. On Wednesday, the 20th inst., in a shode pit about 17 fms. to the north of the above shaft, we discovered a lode about 18 in. wide, containing some good looking gossan, with stones of ore, but cannot say much about it for the present. We are getting on with the new wheel as fast as possible, and hope to be ready for the masons to commence walling up the wheel-pit in the early part of next month.

WHEAL CREBOR.—*August* 13.—I have to inform you the engine-house is up and covered; to-day we have put the boiler in; the masons are engaged building the stack, &c. Mr. Matthews, the engineer, was here with me yesterday, to get ready to put the engine together. Our tributers are getting on tolerably well.

— *Aug.* 20.—I have to inform you that the engineers commenced putting the engine together on Monday last. Our boiler-house will be covered by Friday evening. The masonry will soon be completed. There is no alteration to notice with the tributers since my last report.

WHEAL HAMLYN.—The adit end is much the same as when I wrote you last week. We have cleared up the shaft in the quarry, and have sunk near 4 feet. We are down to water on the east and west lode, and have driven west about 3 fms., where the lode is improved. We are also driving an end west on the same lode, about 5 fms. above this level, which is very promising. We commenced yesterday to sink on the lode, where the lead is, and think it is improving.

WHEAL MAY.—The shaft is below the 10 fathom level 14 feet, and the lode in it is about 3 ft. wide, composed of prian, white iron, and good grey and yellow copper ore. We can do nothing more but get the shaft down to the 20 fathom level as quickly as possible, which I hope will be done by the time I stated—10 weeks.

WHEAL PENHALE.—We have sunk the caunter winze from 6 to 8 feet below the 40 fm. level, but find the plenitude of water retards our progress very much, and I fear we shall be obliged to desist from further sinking until we apply flat-rods to this part of the mine; the lode in the bottom of the winze continues very good: I had hoped, from late appearances, that ere this the lode in the 40 end south would have regained its former character, but another part of the slide has intersected it, and caused a further disorder; as it has also the lode in the stopes in the back of this level, where it passed through it; this slide dips diagonally from the top of the winze down to the present end in the 40 south, up to which, in the end and in the stopes, the lode continued very rich; but above the slide the lode is hove to the west, and much disordered. The lode in the stopes north of the winze is looking very well, and producing very rich work in lead. The tributers are raising a fair quantity of work of a good quality. On the 16th inst. we sampled 20 tons of lead ore.

WHEAL RUSSELL.—The engine-shaft is now down to the 60 fm. level, where a cross-cut is let to drive south to the lode, which is driven about 4 ft., where a branch of rich copper ore has been intersected; it is about 3 in. wide, solid, which looks well for future results. In the 48 fm. level driving west no lode has been taken down since the last report. We have commenced a cross cut to the great north lode in this level, which we hope to intersect in about 14 fms. driving; this will come full 30 fms. under all former workings on this lode, and I consider it an object of great promise. The 16 fm. level has been continued driving south on the cross-course, but the point of the lode has not as yet been reached. The pitches are looking much as usual, and are turning out fair quantities of ore. Upwards of 40 tons of ore are now on surface, but we are prevented from returning it, in consequence of there not being sufficient power for crushing, the pumping, drawing, &c., requiring the whole power of the present wheel. We are getting on with our new wheel as fast as possible, and hope to have the wheel pit ready to commence walling up the early part of next week.

WHEAL RUTH.—Since my last report we have driven the 12 fathom level east 4 fms.; the lode in this end is 2 ft. wide, 18 in. of which is good stamps work. In the 12 fathom level, west of engine-shaft, we have driven 4 fms., and is set to drive at 32s. 6d. ser fm.; the lode in this end is from 18 in. to 2 ft. wide, good saving work, worth 12*l.* per fm., and gradually improving. The rise in the back of the 12 fm. level is set to two men at 17s. 6d. per fm., the lode in which is 18 inches wide, producing good saving work. We have sunk the new engine-shaft 2 fms., and have set 5 fms at 35s. per fm., and to put in all timber that may be required. A parcel of tin, computed 1½ ton, will be ready to offer for sale in two or three days from this time (August 20), after which we shall prepare to dress a similar parcel. Should our prospects continue as at present, we shall now make regular returns.

WHEAL TREASURY.—We have four winzes sunk on Penny lode several fathoms deep, and there is tin and copper in it for 60 fms. in length, which will work on an average tribute of 10s. in 1*l.* We have two pitches on Drowallas lode, working at 10s. in 1*l.*, and the men getting good wages, and two more on Treasury lode. We shall sample on the 26th inst. 30 tons of copper and 250 sacks of tinstuff, which will give upwards of 50*l.* profit, after paying all cost, with every prospect of doing better during the ensuing months.

WHEAL TREMAYNE.—Boundary engine-shaft is down 6 fms. under the 73 fm. level, the branches are still worth 20*l.* per fm. The 73 east is worth 5*l.* per fm.; east, on Allan's branch, 8*l.*, and west 7*l.* per fm. The 63, east of Allen's branch, worth 20*l.* per fm.; west, 6*l.* per fm. The winze on the south branch worth 14*l.* per fm.; east, upon engine lode, 4*l.* per fm.; west, 6*l.* per fm.; winze under, 15*l.* per fm. In the winze below the 53 east the branch is worth 17*l.* per fm. At Painter's flat-rod shaft, in the 50 west, lode 1 ft. wide, worth 8*l.* per fm. The 40 west is worth 4*l.* per fm. The winze under the 30 west worth 6*l.* per fm. At Champion's north lode, in the 10 west, the lode is 4 ft. wide, worth 7*l.* per fm. The tribute department continues to look well, and promises to do the same for the ensuing two as for the past two months.

WHEAL WILLIAMS.—The following report, by Captain James Richards of the Devon Great Consols, has been received:—

August 18.—On Saturday last I, in company with Captain Henry Rodda, inspected this mine, and beg to hand you the following report of the same:—Since the commencement of operations the steam-engine has undergone a thorough repair; a line of rods, main shaft bob, with the other necessary connections, have been made complete to the south lode engine-shaft, and the water drained to the 20 fathom level. The south lode engine-shaft is being cut down, and is now all but completed to the depth of the 20 fm. level, o

sufficient size, divided, cased, footway put in, and in all respects applicable for the purposes required in the development of this part of the concern. The lode standing in the ends of the shaft, so far as cut down, will average 4 feet wide, containing capel, quartz, nests of mundic, and very fine gossan—altogether exceedingly promising. In the 20 fm. level, east of the shaft, the lode, up to within a few feet of the present end, is large (5 ft. wide), composed of capel, mundic, gossan, prian, and ore, and will yield in places ½ ton of the latter per fm.; the lode in the end, however, is of less size, and without ore, being chiefly composed of capels. In the 20 fm. level west the lode is intersected by a large cross-course, which has thrown it out of its regular course; up to the point of intersection the lode is 2½ ft. wide, composed of capels, gossan, prian, and ore, but not containing sufficient of the latter to value. I should recommend that the operations for the present be confined to this part of the concern, and as soon as the shaft is made complete to the bottom, or 30 fm. level, and that the following work be attended to:—to sink the shaft; to drive the 30 fm. level both east and west of the shaft, and also to drive north in the 20 fm. level, west of the same, for intersection of the lode, which is most probably thrown in that direction, The necessary buildings—viz., counting-house, smith's and carpenter's shops, and store room, are all complete, and the concern is in a fair and satisfactory state of working.

WHEAL WREY CONSOLS.—Since last report we have driven about 7 ft. on the course of the lode; it is one of very great promise, and without doubt we shall ere long be into a leady lode; the ground is easy for driving, and not costly in timber; the killas, for several feet wide on each side of the lode, is all bespangled with mundic and carbonate of iron, with small courses of flookan running in an oblique direction to the lode, all of which are feeders from the lode seen to the south-east of our adit level, which we hope to intersect in about two months time, when, no doubt, we shall have good results

FOREIGN MINES.

ALTEN MINING ASSOCIATION.—[Received Aug. 18.]

Raipas, July 16 to 30.—Since my last report no visible alteration has taken place, with the exception of the lode in the winze No. 11, which produces 4 tons of ore per fm, Our produce for July will be about 2 tons of fine copper.

United Mines.—The tributers at Woodfall's make fair returns of ore, and on the whole the prospects have not deteriorated.

Old Mine.—Our progress at this mine is highly satisfactory, and the prospects continue equally promising. In Slungi's sink we have a large and good looking lode, producing from 3 to 3½ tons, of ore per fm. The lode in the north stopes, though smaller, is yielding ores of good quality. The lode in the shaft has considerably improved, producing 4 tons of ore per fm., and assuming a very promising appearance.

Michell's.—Though the return of ore is small, still it is of good quality, and leaves a profit on the operations.

Mancu's.—The produce, though small, is of good quality ore, and we cannot expect any great increase on the present scale of operations.

COPIAPO MINING COMPANY.—[Received August 21.]

June 25.—COPPER MINES—CHECO.—We have an improvement in the 50, where the lode is large, having a branch of ore 1 ft. wide, superior class ore; this is a new feature in the character of Checo, for the last two years little or no ores have been raised below the 30 fm. level. The 30 end is very wide, and producing some good ore. From the 20 and 12 we are also raising some good quality ore; the stopes in the back of the same levels continue much the same.

SAN PEDRO.—Our operations are confined to the stoping of the back of the adit level, where we have a lode from 9 in. to 1 ft. wide, and producing some good quality ore. Our raising, however, in the past month have been small, owing to the few hands employed, and the water running rapidly down the Quabrada, so as to injure some of the houses, corral, &c., which of course has taken some time to repair again.

LA COMPANIA.—In the 18, east of winze, the lode is 3 ft. wide, giving a fair quantity of ore, but of a class that will barely pay the heavy land carriage from here to Flamenco. In the winze the lode is still in an unsettled state, produced by the intersection of the slide. The stopes are yielding well.

LA REYNA.—The men are employed in sinking in search of water on the new road, which accounts for the falling off in the quantity of ore.

SAN AUGUSTIN.—We are driving the 12 east and west in the eastern level; the lode is 4 ft. wide, composed of gossan of a rich character, with stones of ore of from 25 to 30 per cent.; in the western level it is large, and much the same as the eastern. In the adit level west the lode is from 3 to 4 ft. wide, producing some very good ore; this is the best looking level that I have seen here, and I expect shortly to have to report a large and rich course of ore, and make large returns.

SAN CARLOS.—The Englishmen have been engaged sinking in search of water on the new road. The lode maintains its size and character.

Produce for May—Checo	*Tons*	30
La Compania		12
San Augustin		8
La Reyna		3
San Pedro		3—56 tons.

SILVER MINES—AL FIN HALLADA.—In the pique or bottom chiffon the lode is from 2 to 3 ft. wide, composed of a beautiful quartz, and thickly interspersed with "plata blanca," or white silver. In the 20 fm. level the several labores there being wrought on continue to yield well, in all of which the lode maintains its size, and from each average quality ore is being taken out. In the 15 fm. level above the lode is 1½ ft. wide, producing very good ore. The labores to the north yield some good ore. We have nearly completed the cross-cut to the new shaft, and this will afford greater facilities for more effectually working the mine, for at present all the stuff is brought to surface on men's shoulders.

SAN JOSE DEL CARMEN.—Our operations are confined to driving two levels; the one south of the cross-cut, and north on the manto, where it looks remarkably well.

MERCEDITAS.—In the 25 west the lode is 1 ft. wide, quartz and clay, with a small portion of metal frio; east, the lode is 15 in. wide, giving occasionally stones of white silver. In the chiffon below the lode is 18 in. wide, embedded in beautiful strata, quite congenial for a rich bunch of ore.

CARMEN ALTO.—The lode in the 16 is very wide, composed of quartz, with deposits of copper ore. In the chiffon below it is just the same.

SANTA ANA.—In driving north from the south chiffon we have a lode 1½ ft. wide, with a leader of 6 in. on the eastern wall of superior class ore. We have opened about 4 fms. of ground, and for that distance in the bottom of the level we have a good lode, and shall shortly commence sinking upon it, when we shall increase our returns. Ore sent down in the past month 17 cargas, and now on the cancha 10 cargas.

COLORADA.—The lode in the chiffon is very large, and composed of a beautiful spar, with sprigs of metal frio. The strata also very congenial for silver.

GOLD MINE—DESCUBRIDORA DE ORA.—In the present end north we have a lode 8 in. wide, producing a little gold, with rich stones of copper ore, and looking better than for some time past; this, with the exception of taking out the water, is all that is being done.

460 mks. of silver, and a small ingot of gold, arrived by the steamer, value 1000*l.*

LINARES MINES.—The following has been received from Capt. Curry:—

Aug. 9.—In the 55, west of Wilson's shaft, the lode has improved, being now worth 3½ tons per fm., with signs of further improvement. The stopes east (the Tanteo) and pitches in advance of them, under the 45, are also looking well, so that we may reasonably expect a good lode for a considerable distance in advance of our present end east in the 55 fm. level. In the 45, east of Shaw's shaft, the lode is worth from 1 to 1½ ton of ore per fm., and somewhat more promising. In the pitch behind the end, and in that working under the 31, the men are approaching each other, so that we may soon expect a communication at this point, which will ventilate both levels, and enable us to proceed with additional work in the 31, now clearing, where we are 50 fms. east of Shaw's shaft, and have scrambled through the old workings about 10 fms. more. Between San Jose winze and the cross-cut to San Juan shaft we have four men stoping the lode, at a low tribute. The tributers throughout the mine are sending up considerable quantities of ore. Weighed in this week, 49 tons 9 cwts.: in stock, 730 tons 7 cwts. Pig-lead weighed in this week, 23 tons 7 cwts.: in stock, 246 tons 5 cwts.

"DEVON BURRA BURRA."—The great mineral discovery on the eastern side of Tavistock, to which we referred a fortnight since, bids fair to rival the far-famed Australian Burra Burra. Some large blocks of the grey oxide of copper, which had cropped out close to the surface, and which led directly to the discovery, are now being forwarded to London, where they are likely to be regarded with intense interest, as the first and largest specimens of English copper ore of such character and quality ever yet discovered in this country at the surface. Five or six other lodes have already been opened on; and at 21 feet only from the surface, to which depth a shaft has been sunk on one of them, beautiful yellow copper ore is now being raised. This is a strong and well-defined lode, six feet big, without any perceptible underlie. There are four other lodes within 40 fathoms, every one of which contains copper on the backs. Another lode, of the most remarkable character, is between five and six fathoms big near the surface, and is now being driven on from a shallow adit. Owing to the indisposition of the late tenant towards mining operations, this rich district has never hitherto been explored, he having paid his landlord an additional rent to avoid having the land broken. As a natural result, these mineral deposits have remained undiscovered to the present time. There is no doubt whatever that the Devon Great Consols main lode is one of the lodes running through this ground. The stratum is the true mineral bearing clay-slate, having the granite in close proximity on the east dipping towards this ground, bounded on the south by Whitchurch Down, and northward by Cox Tor, a hornblendic hill capping the clay-slate. To the miner and the geologist this virgin mineral ground offers no ordinary attractions, and we understand that it is constantly visited by those engaged in mining operations. We are glad that an appropriate name has been selected for this remarkable adventure, instead of its original cognomen—that of "Wheal Gate-Post."

GREAT PEAT WORKING COMPANY OF IRELAND.—It is with much pleasure we observe, from an advertisement in our columns, that this company has got into a position to commence working on a large scale, convinced as we are of the immense benefits that will accrue to the labouring population when this manufacure is extensively carried out, for the products of which there will be a large and an increasing demand. The superiority of this charcoal over every other kind of fuel, its freedom from sulphur, great calorific power, steady combustion, and total absence of clinker, render it peculiarly well adapted for locomotive, marine, and other engine boilers; for smelting, and all manufacturing purposes. It is also an unrivalled fuel for domestic purposes; and being made in flat blocks, it is a desirable one for exportation, occupying one-third less space than ordinary coal, though of equal density. The works are still actively progressing, and it is expected in a few months to be able to supply 600 tons of condensed peat coal weekly.

The directors of the Peninsular and Oriental Steam-ship Company have given orders for the construction of a class of iron paddle-wheel steamers, which they are sanguine in expecting will surpass, both in speed and other qualities, any of the existing ocean-going vessels, constructed either on this or the other side of the Atlantic. They are to be of 800-horse power, and are expected to make the passage between Southampton and Alexandria in from nine to ten days

Sir David Brewster has been elected foreign corresponding member of the Imperial Academy of Sciences of Vienna.

Prof. Liebig has been decorated with the cross of Commander of the Order of Francis Joseph, for the services he has rendered to the science of chemistry.

Current Prices of Metals, Stocks, & Shares.

METAL MARKET, London, August 22, 1851.

	per ton.
ENGLISH IRON. *a*	
Bar, bolt, & square, London	£5 5 0–5 10
Nail rods	6 2 6–6 10
Hoops	7 0 0–7 10
Sheets (singles)	7 12 6–8 10
Bars, at Cardiff & Newport	4 10 0–4 15
Refined metal, Wales*	3 0 0–3 5
Do. anthracite*	3 10 0
Pigs in Wales	3 0 0–3 15
Do. do. forge	2 5 0–2 10
Do., No. 1, Clyde .*net cash*	1 18 6–2 0
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport*	3 10 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0
Stirling's Patent Toughened Pigs in Glasgow	2 15 0
Toughened Pigs in Wales	3 10–3 15
Staffordshire bars, at the works	5 5 0–6 0
Rails	4 17 6–5 0
Chairs (Clyde)	4 0 0
FOREIGN IRON. *b*	
Swedish	11 10–11 15
CCND	17 10 0
PSI	——
Gourieff	——
Archangel	——
FOREIGN STEEL. *c*	
Swedish keg	14 0–14 15
Ditto faggot	15 0–17 0
ENGLISH COPPER. *d*	
Sheets, sheathing, & bolts, *p. lb.*	0 0 9½
Tough cake *per ton*	84 0 0

Tile	£83 0 0
Old copper *e* *per lb.*	8½*d*
Yellow Metal Sheathing	7½*d*
Wetterstedt's Pat. Metal† *Cwt.*	1 11 0
FOREIGN COPPER. *f*	
South American, in bond	77 0–87 0
ENGLISH LEAD. *g*	
Pig *per ton*	17 0 0
Sheet	18 0–18 10
Pipe	19 0 0
Red lead	19 0 0
White ditto	24 0 0
Patent shot	20 0 0
FOREIGN LEAD. *h*	
Spanish, in bond	17 0 0
ENGLISH TIN. *i*	
Block *per cwt.*	4 4 0
Bar	4 5 0
Refined	4 10 0
FOREIGN TIN *k*	
Banca, H. C.	4 2–4 3 6
Straits	4 0 0–4 2
TIN-PLATES. *l*	
IC Coke *per box*	1 5–1 6
IC Charcoal	1 10–1 12
IX ditto	1 16 0
SPELTER. *m*	
Plates, warehoused *per ton*	14 10–14 12 6
Ditto, to arrive	14 10–14 12 6
ZINC. *n*	
English sheet *per ton*	21 0 0
QUICKSILVER *o* *per lb.*	3*s* 6*d*

WELSH BAR-IRON is in better demand, and a good business doing; the shipments to India and China for the eight months ending 20th August, as compared with the shipments for the corresponding period of last year, are as follows—viz: To India, 1850, 19,601 tons; 1851, 9826 tons.—To China, 1850, 3249 tons; 1851, 32.6 tons.

STAFFORDSHIRE IRON is in good demand. The exports to India and China for the first eight months of the past and present year respectively, have been as follows—viz.: To India, 1850, sheets and hoops, 7164 tons; rods, 3089 tons: 1851, sheets and hoops, 4512 tons; rods, 1624 tons.—To China, 1850, sheets and hoops, 446 tons; rods, 1902 tons: 1851, sheets and hoops, 630 tons; rods, 3120 tons.

SCOTCH PIG-IRON.—There are reports of large operations, which, however, require confirmation. No. 1, American brands may be quoted at 40s. free on board in Glasgow, storekeepers' warrants; ordinary brands, makers' obligations, 38s.

SWEDISH IRON.—A parcel of about 50 tons have been disposed of at 11*l.* 5s.

SWEDISH STEEL.—About 140 tons have been sold, principally to arrive, at 13*l.* 17s. 6d. over ship's side.

COPPER is in good request. The shipments for the first eight months of 1850 and 1851, are as follows:—To India, 1850, bolt and tile, 851 tons; sheet, 2265 tons: 1851, bolt and tile, 408 tons; sheet, 2187 tons.—To China, 1850, bolt and tile, 204 tons; sheet, 165 tons: 1851, bolt and tile, 8 tons; sheet, 284 tons.

BRITISH TIN is in moderate demand.

FOREIGN TIN.—In Banca there are buyers at 80s. 6d.; sellers at 81s. 6d.

SPELTER—The only transaction to record is a sale of 50 tons, at 14*l.* 5s. The exports to 20th August, 1850 and 1851, are as follows:—To India, 1850, 2505 tons; 1851, 1109 tons.—To China, 1850, 10 tons; 1851, 50 tons.

LEAD is less in request. The exports to 20th August, 1850 and 1851 respectively, have been as follows:—To India, 1850, 918 tons pig; 108 tons sheet: 1851, 499 tons pig; 39 tons sheet.—China, 1850, 555 tons pig; 31 tons sheet: 1851, 2226 tons pig; 7 tons sheet.

TIN-PLATES are less inquired after. Shipments to 20th August, 1850 and 1851, are as follows:—To India, 1850, 7198 boxes; 1851, 12,354 boxes.—To China, 1850, 22,977 boxes; 1851, 32,168 boxes.

GLASGOW, AUGUST 21.—There is a good inquiry for Scotch pig-iron, and a large business has been done; prices are firmer, and appear likely to advance. The shipments during this month will probably be double those of August last year. There has again been an endeavour on the part of some of the masters to bring about an arrangement for reducing the make, and there can be no doubt that they feel the effects of the very low prices, and sooner or later there certainly must be a reduction, if the low rates continue.

Mixed Nos., good brands, free on board here		38s. 6d. per ton, nett cash.	
No. 3,	ditto	ditto	38s. 3d. ditto
Mixed Nos., Gartsherrie		ditto	39s. 6d. ditto
No. 1,	ditto	ditto	40s. 6d. ditto
No. 1, Coltness, free on board at Leith			42s. 0d. ditto
Mixed Nos., good brands, free on board Frith of Forth			41s. 0d. ditto

Bars, 5*l.* 5s. to 5*l.* 12s. 6d.; nail rods, 6*l.*; sheet, 7*l.* 7s. 6d. to 7*l.* 10s.; hoop, 7*l.* 10s.

GENERAL SHIPMENTS OF PIG-IRON.

	July, 1850.	July, 1851.
Broomielaw, Port-Dundas, and Kirkintilloch	Tons 16,146	21,168
Charleston, Bo'ness, Burntisland, Clackmannan, Alloa, Leith —East Coast	5,435	11,575
Ardrossan, Troon, Irvine, Ayr—West Coast	3,025	9,828
Total	Tons 24,606	42,571

NEW YORK, AUGUST 6.—We have no change to note in the market for Scotch pig; some further sales have been made at $19 50c., six months, for good brands. English bars are held at $34, without sales: 450 tons Irish wrought-scrap brought about $25, six months. Imports from January 1 to July 31, 1851:—

	Bar.	Pig.	
From foreign ports	Tons 33,373	31,985	Bdls. 424,211
From coastwise, ditto	807	2,547	3,600
Total	34,180	34,532	427,811
Same time last year	29,661	28,503	280,693

Pig-lead continues dull, and prices favour buyers—the sales are: 1200 pigs Galena, at $4 75c., cash; and 90 tons soft English, to arrive, $4 62½c., time and interest.—Import from January 1 to July 31, 1851, 189,248 pigs. Foreign coal arrives sparingly, and prices tend upward—the sales are: 150 tons Liverpool Orrel, at 8s.—Import of foreign from January 1 to July 31, 1851, 31,525 tons; same time last year, 32,411 tons.

MINES.—The crippled condition of railway property at a period when it was expected to have resumed one of its most flourishing aspects, is producing a gradual withdrawal of capital from that gigantic interest—one of the effects of which will be, no doubt, to increase investments in mines. An effect is, indeed, already perceptible in our market—not only in the increased amount of business, but the growing and extended inquiry for mining shares, even of the speculative classes, in which more in amount is now doing than in dividend mines. A remarkable degree of success is also attending the numerous explorations in the eastern part of Cornwall and the Tavistock district—for the shares in which great activity prevails; and being in some cases at a considerable advance on the original cost, a fresh stimulus is given to the market, of a legitimate and satisfactory character.

In the Metal Market,—Copper is in fair demand and steady in price.—Lead is without material alteration.—Tin, English and Foreign, is very quiet, firm in price.—Tin-Plates are the turn easier to buy.

The price of gold in bars (standard) is 3*l.* 17s. 9d. per oz.; silver in bars (ditto), 5s. 0½d. per oz.; and new dollars, 4s. 11½d. per oz.

The London imports for the week comprise—from Havre, 40 barrels zinc nails; Antwerp, 119 casks zinc, 25 casks spelter, 86 casks nails; Adelaide, 2775 bags copper ore, 7027 tiles, 230 blocks 1607 cakes copper, 5 bags regulus; Stettin, 12,905 plates spelter; Port Phillip, 901 bags copper ore; Amsterdam, 200 slabs tin; Ceylon, 228 barrels 20 casks plumbago; Sydney, 2003 bags copper ore; Dublin, 120 tons ore; Cadiz, 636 bars lead.

At Hull—from Hamburg, 3304 plates of spelter; Frederickshaven, 320 blocks of copper.

At Bristol—from Rotterdam, 62 casks manganese, 20 casks plumbago; Stettin, 1114 plates spelter.

At Liverpool—from Carthagena, 1034 pigs lead, 337 baskets copper regulus; Arica, 104 bars copper; Illay, 640 bars, 200 tons copper ore; Realijo, 26 serons silver ore; La Union, 458 serons, 2 cases of silver ore; Antwerp, 480 barrels of nails; New York, 8 cases scrap steel, 34 barrels chrome ore; St. John, New Brunswick, 250 barrels plumbago; Hamburgh, 30 barrels black oxide of manganese; Rotterdam, 130 barrels, 180 tons manganese; Dordt, 231 tons black oxide of manganese; New Orleans, 24 barrels lead ore, 2 bags specie.

The arrivals at Swansea include—from Cuba, 1450 tons of copper ore; from Santonia, 120 tons of copper ore.

The ticketings for 100 tons of Laxey (Isle of Man) lead ore varied from —Pontifex and Wood, 14*l.* 14s. per ton, to 19*l.* 4s. by Walker, Parker, and Co. For the Foxdale lead ore, 90 tons, the prices ranged from 8*l.* 11s. 6d. by Pontifex and Wood, to 10*l.* 18s. 6d. by Mather and Co.

Callington Mines sampled on Wednesday a parcel of silver-lead ore, computed 45 tons, for sale on Wednesday next.

Tincroft has sampled 736 tons rich copper ore, and 22 tons tin ore.

Two parcels of silver-lead ore from Boringdon Park Mine were sold this week. No. 1, 7 tons 6 cwts., realised 23*l.* 5s. per ton, and No. 2, 3 tons, realised 13*l.* per ton. A good deal of ore is broken at the mine, but for want of sufficient water until the engine is at work it cannot be dressed. The walls of the engine-house were to be up this week, and most of the engine is delivered on the mine.

At Wheal Mary Ann quarterly meeting, on Tuesday, the accounts showed—Sale of lead ores, 5127*l.* 10s.—Labour cost for March, April, and May, 3118*l.* 8s. 3d.; lords' dues, 414*l.* 15s 11d.; merchants' bills, 869*l.* 9s.: leaving 724*l.* 16s. 10d. profit; add balance in hand last account, 1349*l.* 1s. 11d., makes 2073*l.* 18s. 9d.—dividend, 1536*l.*: leaves balance to next account, 537*l.* 18s. 9d. Pollard's shaft is sunk 10½ fms. under the 70 fm. level; the lode north of the shaft is 4 ft. wide, worth 10*l.* per fm.; the south is worth 8*l.*; and north of Penhall's winze is 1½ ft. wide, worth 9*l.* per fm. The lode in the 60 south is worth 7*l.* per fm.; the winze under is worth 12*l.* per fm. The lode in the 50 south is worth 10*l.* per fathom; and in the 70, south of Barratt's, 12*l.* per fathom. The stopes generally throughout the mine are as usually productive. They calculate doing better in the next three months.

At Providence Mines quarterly meeting, on Wednesday, the accounts showed—Tin sold (less dues), 2089*l.* 1s. 6d.; copper ditto, 238*l.* 5s. 8d.; sundries, 3*l.* 8s. 4d.=2330*l.* 15s. 6d.—Labour cost for May, June, and July, 1481*l.* 14s. 2d.; merchants' bills, 393*l.* 13s. 9d.=1875*l.* 7s. 11d.: leaves a profit on the quarter, 455*l.* 7s. 7d.; balance in hand last account, 6*l.* 7s. 6d.=461*l.* 15s. 1d.—deduct dividend, 420*l.*: leaves balance to next account, 41*l.* 15s. 1d. A dividend of 15s. per share was declared.

At Wheal Tremayne meeting, on Tuesday, the accounts showed—Tin ore sold, June, July, and Aug., 250*l.* 9s. 6d.; copper ore, 315*l.* 0s. 7d.; arsenic and sundries, 12*l.* 16s. 10d.=2938*l.* 6s. 11d.—Labour cost for May, 975*l.* 19s. 10d.; June, 1007*l.* 3s. 4d.; merchants' bills, 396*l.* 17s. 11d.; lord's dues, 140*l.* 16s. 6d.: leaving profit on the two months, 417*l.* 9s. 4d.; add balance from last account, 174*l.* 15s. 4d.=592*l.* 4s. 8d.; from which deduct dividend of 512*l.*, leaves balance in hand to next account, 80*l.* 4s. 8d. A dividend of 10s. per share was made.

St. Ives Consols accounts for June quarter show—Labour, carriage, &c., 2373*l.* 3s. 5d.; coals, 232*l.* 8s. 6d.; merchants' bills, 433*l.* 5s.=3038*l.* 16s. 11d. —By tin sold, 3174*l.* 15s. 6d.; copper ores, 210*l.* 5s. 5d.—showing profit of 346*l.* 4s.; add balance in favour of adventurers March last, 144*l.* 5s. 5d. =490*l.* 9s. 5d. By dividend now made, 376*l.*: leaving in favour of mine, 114*l.* 9s. 5d.

At the usual two-monthly meeting of shareholders in the Bedford United Mining Company, held at the offices, Threadneedle-street, on Wednesday, the 20th inst. (J. Y. Watson, Esq., in the chair), the minutes of the last meeting having been read and confirmed, the statement of accounts, showing a cash balance in hand of 1344*l.* 1s., and a statement showing receipts over payments before the next meeting, to be held on the 22d October, of 1793*l.* 16s. 4d. was read by the chairman and passed. A dividend of 4s. per share, amounting to 800*l.*, was declared payable on and after the 26th inst.—[The report of the agent will be found among our Mining Correspondence.]

At the two-monthly meeting of shareholders in the Merllyn Mining Company, held at the offices, George-yard, on Tuesday last (J. Y. Watson, Esq., in the chair), the accounts showed a cash balance in hand of 86*l.* 4s. 9d., and assets over liabilities of 253*l.* 2s. 6d. The chairman stated that, at the previous two-monthly meeting, it was left to the committee of management to decide upon the purchase of a steam-engine, and the committee wishing to have the best advice, not only as to the size of the engine required, but as to the general prospects of the mine, sent Mr. James Wolferstan, of the East and South Tamar Mines, to make an inspection, and to report to them his views; and whilst he was happy to say Mr. Wolferstan's report of the state of this mine fully confirmed the previous report of Capt. Michell, he advised the erection of a 22-inch horizontal engine. The committee, after due consideration, purchased a 30-inch cylinder engine, with a 10-ton boiler, &c., complete, for 750*l.*, which it is hoped will be erected and at work in about two months from the present time. To pay for the engine, it was unanimously resolved that a call of 5s. per share be made, payable forthwith. A report from Capt. Michell was read, which will be found among our "Mining Correspondence." Capt. Michell, who was present, stated, in answer to questions put to him, that he had been laying open 100 tons of lead per month, and had now 500 tons, worth 11*l.* to 12*l.* per ton, in reserve. That after the engine got to work, he could raise 100 tons per month, which he calculated would yield 600*l.* per month profit; and he, therefore, hoped to give the shareholders a dividend before Christmas next.

At East Pool meeting, on Tuesday, the accounts for June and July showed—Costs and merchants' bills, 1514*l.*" 11s. 11d.—Balance from last account, 98*l.* 6s. 11d.; ores and materials sold, 1153*l.* 17s.; water drainage, 100*l.*: leaving balance against adventurers, 162*l.* 8s.

At Boscaswell Downs meeting, the accounts for three months, ending June, showed—Balance from last account, 92*l.* 2s. 9d.; costs and merchants' bills, 176*l.* 3s. 5d.=268*l.* 6s. 2d.—Sale of ores, &c., 107*l.* 12s. 1d.: leaving balance against adventurers, 161*l.* 14s. 1d.

At the Kenmare meeting, on Wednesday, the accounts showed—Capital on 15,010 shares, 15,010*l.*; creditors, 355*l.* 13s. 2d. = 15,365*l.* 13s. 2d.—Balance at the bankers, and on loan, 877*4l.* 10s.; property at Kenmare, 5040*l.* 14s. 11d.; preliminary expenses, 1207*l.* 16s. 8d.; mining expenses April, May, and June, 342*l.* 11s. 7d.=15,365*l.* 13s. 2d. An assay of the ore brought home by Capt. Charles Thomas yields, according to Mr. John Mitchell, of Kentish Town, 36 per cent. for copper, and 21¼ ozs. of silver to the ton, worth about 33*l.* per ton. The report and accounts were received and adopted, and great reliance is placed on the ultimate result.

At Wheal Squire meeting, on the 12th inst., the accounts showed—Labour cost for six months, to end of July, 526*l.* 19s. 2d.; merchants' bills, 1510*l.* 19s. 5d.; erecting engine, 26*l.* 5s.; interest, 1*l.* 4s. 6d.=2065*l.* 8s. 1d. —Balance end of Jan., 36*l.* 17s.; calls, 494*l.*: leaves balance against adventurers, 1534*l.* 11s. 1d. A call of 30s. per share was made, to be collected forthwith. Mr. T. W. Robinson was appointed purser at a salary of 4*l.* 4s. per month, and Capt. Thomas Richards's salary fixed at 3*l.* 3s. per month. A report from Captain Richards stated that the engine works remarkably well, that the water would be down to the 30 fathom level by Friday last, and he expected, in a very short time, to see the bottom in the 40, the depth of the present engine-shaft.

At the Condurrow meeting, on Monday, the accounts showed—Balance last account, 64*l.* 4s. 7d.; ores sold, 1591*l.* 10s. 9d.; old materials, 6*l.* 2s.; property tax on dues to be allowed, 20*l.* 6s. 7d.=1682*l.* 3s. 11d.—By labour cost June and July, 1243*l.* 8s. 3d.; merchants' bills, 325*l.* 12s. 7d.; lord's dues, 79*l.* 11s. 6d.: leaves balance in hand, 33*l.* 11s. 7d. A report from Capt. N. Vivian, the manager, was read, which stated that a lode 1 ft. wide, composed of mundic and tin, had been discovered in driving a cross-cut at the sump-shaft, which, from its underlay, would fall into the old lode 3 fms. below the 100, and probably enrich it. In the 100 fathom level the lode is worth 20*l.* per fm. At Hope's shaft, in the 90, the lode is worth 20*l.* per fathom. Roberts's lode, 2 fathoms west of the shaft, is worth 30*l.* per fathom.

At the Craig-y-Mwyn meeting, on the 13th inst., the accounts showed—Calls received, 880*l.*; ore sold, 493*l.* 1s. 5d.=1373*l.* 1s. 5d.—By 10 months' expenditure, as per cost-sheets, 1213*l.* 10s. 11d.: leaving balance in favour of the adventurers, 159*l.* 10s. 8d.; against which there is due on water-wheel, &c., about 130*l.* The report and accounts were approved and adopted, and an epitome ordered to be published in the *Mining Journal.* A call of 3s. per share was made. These mines are well known for their large surface produce in former workings. The great vein has hitherto been seen only at shallow depths—say, 25 fathoms from surface: at the deepest part, where it was found to be very large, and showing ore of considerable value, an overflow of water caused suspension of the works, and a cross-cut is now going out from No. 4 level to intersect it, the strata being similar to that above. In No. 3 it has been found, at its junction with the north lode, to be richly charged with ore and jack, running westerly for the 15 ft. it has been explored, and is still holding away, likely to prove of considerable value and importance. In a winze below No. 3 west there is a solid rib of ore, from 6 to 12 inches wide, worth about 30*l.* per fathom, which is a further inducement why it should be seen at No. 4 with every possible expedition; the shoot of ore evidently appears to be dipping westward, and, if met with rich in No. 4, there can be no question of the advisability to cross-cut north and see the several other lodes running through this mineralized sett, which promises to make abundant return upon a small outlay. Messrs. Richard N. Broughton, Thomas Bibby, Robert Broughton, Wm. Lloyd Asterley, and D. P. Evans, were elected the committee for the ensuing two months.

At the Devon Consols North second two-monthly meeting, on Monday (Francis Morris, Esq., in the chair), the committee reported a great and decided improvement in the mine:—

The north lode, which has now been sunk on 17 fms., is full 4 feet wide, composed of large rocks of mundic, spar, prian, peach, and stones of beautiful yellow copper ore, and the mundic is becoming more and more impregnated with ore also. In fact, a more promising lode at the present depth could not be anticipated, and it is but seldom such early prospects of a successful result can be obtained. The committee believe that they shall be able, at no distant day, to congratulate the adventurers on having a good course of ore. The accounts showed a balance in favour of the mine of 2154*l.* 13s. 2d.

At Wheal Owles meeting, the accounts for April, May, and June, showed —To costs and merchants' bills, 4469*l.* 11s. 5d.—Balance from last account, 998*l.* 10s. 4d.; ores sold, 1171*l.* 16s.; sundry receipts, 482*l.* 19s. 8d.: leaving balance against adventurers, 1816*l.* 5s. 5d.

At Carwinnen Mine meeting, on the 15th inst., the accounts showed—Balance last account, 26*l.* 5s.; costs from March to end of June, 152*l.* 17s. 9d.; merchants' bills, 42*l.* 14s. 3d.=221*l.* 17s.—less call 5th May, 128*l.*: leaving balance to next account, 93*l.* 17s.

At Silver Valley and Wheal Brothers meeting, on Monday, a report from Capt. Oliver Matthews was read, which stated that a rich branch of silver ore had been discovered, which, on assay, produced 2387 ozs. of silver to the ton, or in actual value nearly 600*l.* per ton. From the same lode in the 24 fm. level specimens of grey oxide of silver had been broken, of a richer quality than any yet seen; there was a good branch of silver ore in sight. Murray's shaft was cleared ready for working, and the committee congratulated the shareholders on the prospects of the mine, opened at such moderate cost, leaving ample funds for further working.—[We are glad to notice the satisfactory progress of this adventure, not only as a gratifying result to the shareholders, but from the fact of our being led to doubt the statements put forth when it was first brought before the public. Besides the encouraging reports read at the meeting (inserted in another column), we learn that their agent, experienced in the Mexican mines, asserts that present appearances are equal to anything he has seen in the mines of that country; that they have met with leaders of native silver, and everything indicating an approach to a large deposit of that ore.]

At Ballowal and Nanpean meeting, the accounts for three months, ending June, showed—Balance last account, 739*l.* 14s. 4d.; costs and merchants' bills, 337*l.* 11s. 9d.=1077*l.* 6s. 1d.—By ores sold, &c., 103*l.* 17s. 6d.; call, 240*l.*: leaving balance against adventurers, 733*l.* 8s. 7d.—A call of 2*l.* per share was made.

At the East Gunnis Lake meeting, on Wednesday, the accounts showed —Balance last account, 69*l.* 4s. 2d.; calls, 812*l.* 10s. = 881*l.* 14s. 2d.—By labour cost for May, 155*l.* 16s. 9d.; ditto June, 179*l.* 1s. 11d.; offices expenses, rent, &c., 13*l.* 18s. 10d.; law costs, 24*l.* 12s. 8d.: leaving balance in hand, 508*l.* 4s. From an estimate of receipts and expenditure up to next meeting, Oct. 22, it is calculated there will remain a balance in hand of 320*l.* 14s. A list of all parties who had not paid the last call was laid before the meeting, when the secretary was directed to address a letter to each, requesting immediate payment.

At Penzance Consols adjourned meeting, yesterday, a call of 1*l.* per share was made, to purchase an engine of suitable size—Capts. Floyd and Paul having reported favourably as to the present prospects of the mine. The last sale of tin realised about 51*l.* per ton.

At Trannack and Bosence meeting on Thursday, it was resolved forthwith to erect a 60-in. cylinder engine, to give the concern an effective trial. A call of 10s. per share was accordingly made.

At Wheal Arthur meeting (reported in our last), the following particulars of the arrears due upon calls were omitted—Made in May, 11*l.* 5s.; July, 223*l.* 7s., besides three calls due on 68 shares standing over for forfeiture, 51*l.*=285*l.* 12s. 6d.

We learn there are several improvements in Devon Great Consols, particularly in Hitchins's engine-shaft, 7 fms. under the 103 fm. level, where the lode will now turn out about 15 tons of copper ore per fathom. At Anna Maria the lode also improves as it deepens. At Wheal Emma the 74 is worth 3 tons per fm. On the south lode (Thomas's) the prospects are highly flattering, having broken for the month more ore than can be brought forward to be sampled on Monday week.

At Wheal Providence (South Sydenham) the new 40-in. cylinder steam-engine, manufactured by Gill and Rundle, of Tavistock, under the superintendance of Messrs. Hockin and Loam, the well-known engineers, was put to work on the 11th inst., in the presence of a highly respectable company, amongst whom were George Trickett, Esq. (chairman), the Mayor of Callington, George Haye, Esq., W. G. Gard, Esq., of Wheal Maria, J. Peter, Esq., Messrs. Conway, Luscombe, Pike, Commins, Harvey, Spear, and Newton, Capts. Robert Dunstan, Thomas Penaluna, sen., Lean, Stephens, Floyd, Opie, Coward, Spargo, and others. After a good dinner and the usual loyal toasts, "mining and all its branches" was proposed, and heartily responded to. Many excellent speeches were delivered, and the company separated, highly pleased at the excellent arrangements of the company's agent, Capt. T. M. Penaluna. The water is now in fork to the 12 fm. level, and the men busily engaged in dropping another lift to the 24, where, if reports be true, a good lode is anticipated.

At Wheal Precious cross-cut, driving south in the 12, several branches have been passed through underlaying north, and others south—ground very favourable.

At Polberrow Mine, the 16 fm. level in De Tastet's, under the runs of tin above, are looking very promising. The pitches much as usual. June and July tin was 50 tons, and would have been more had they had sufficient surface water to dress it. The estimated quantity for August is 26 tons.

At Bryn Consols they are progressing favourably. The several lodes in the deep adit are exceedingly rich for copper ore. A stone of solid copper has been cut in the shallow adit No. 5, weighing 35 lbs. The men have commenced sinking on the lode, and are to drive the level 30 fms. further towards the tin lode. Mr. W. Lelean is expected in London with fine samples of the ore in the course of next week.

At East Wheal Russell, some good orey work has been broken. Important results are shortly expected in driving on the lode from the tunnel.

At North Buller Mine, in King's shaft, in the 27 fathom level from the surface, they have discovered a slab of black and yellow copper ore, producing 37 per cent. of copper. There has been a great demand in Cornwall for shares; but the principal portion are held by London adventurers.

The engine-house at Wheal Crebor is completed, and the engineers commenced putting in the engine on Monday.

At Carvannal the engine-shaft is down 59 fathoms. In the end west of the 56 the lode is getting larger, and will soon be under the orey ground they met with in the level above—the 46 end being now worth 50*l.* per fm. They purpose sampling about 60 tons of ore next week.

We have pleasure in drawing attention to the report on Wheal Williams, by Captain James Richards, of Devon Great Consols, in another column. It will be observed that there has been no delay in carrying out the operations, but that much important and necessary work has been done, the mine being now in full course of working, with a good powerful steam-engine, amply sufficient to carry the mine to a considerable depth and prove its value. This mine being so close to the Great Wheal Maria, and upon the *same* lodes, tends strongly to the conclusion that it will result in a most profitable concern, confirming the general opinions expressed by all practical miners.

Operations commenced at Swanpool Mine, near Falmouth, on Saturday, when some miners were put to clear out the adit.

At Wheal Castle the lode has been cut in the adit cross-cut: it is very promising, and there has already been some fine specimens taken from it. This is very encouraging for the neighbourhood, inasmuch as the lode is parallel with, and goes through, Lydford Consols and South Wheal Fanny.

We have just learned that an improvement has taken place in Bodmin Moor Consols, sufficiently indicative of good and proximate results to the adventurers. An official report will appear in our next Journal.

We understand that the buildings are commenced at Trebell Consols for the engine-house and necessary workshops—that the committee are in negociation for a steam-engine, with stamps, &c., of about 36-in. cylinder; and the adventurers are determined to carry on the undertaking with spirit. Already a large pile of tinstuff is at grass, and it only waits the erection of the stamps to make immediate returns of tin. The copper lode bids fair to turn out beyond the most sanguine expectations.

From Cefn Gwyn, we learn that Capt. Trevethan has returned to the mine, and will at once put it into perfect working condition, in accordance with the resolution of the shareholders at their last meeting. All claims are to be immediately discharged, and the adventurers to have the preference of taking any of the unissued shares.

At Allt-y-Crib Mine the rods have been connected with the wheel and pumping apparatus, and the water is drained to 5 fms. below the deep adit. The discovery of ore at Llwynadda continues to improve, and the other parts of the mine are in good ore, but without any alteration worth noticing. A dividend of 5s. per share for the quarter ending in June will be declared in the course of a few days.

At Grogwinion Mine the prospects are encouraging. The deep adit eastward is opening some good ore under the long drift of ore ground, with a good deal of high orey ground before it.

At Daren Mine the agent's report speaks of the discovery of a good body of copper ore in driving Oliver's adit westward, towards the ore ground opened in Francis's adit. The sales of ore in this mine slightly exceed the cost, notwithstanding the outlay in opening ground under the old mine and in providing new machinery. It is, however, not certain that some capital in addition to the sales may not be necessary to fairly open the old mine, the ore ground of which is upwards of 200 fms. long, and beset with the difficulties common to all great mining undertakings.

At Bronfloyd the ground on the vein is opening most promisingly. The sales of ore are leaving a profit upon the working cost, as well as sinking an engine-shaft and opening ground by means of the adits eastward and westward. There are still 100 fms. before the adit in the western forefield before that level will reach the old Bronfloyd Mine, from which a great abundance of ore has been taken. The backs will be about 30 fms., and there is at present a good course of ore in the adit moving towards the old mine.

At Cwm Daren a good course of silver-lead ore has recently come into the engine-shaft, which is continuing downwards, and the mine is likely to be a good concern.

At Caegynon the tutworks are travelling through good ore, both in the north and south lodes, and sales will shortly be effected. A great deal of valuable ore ground has already been opened, which will, as soon as the crushing power is supplied with water, be taken away with much benefit to the company.

At Rhydtalog a water-wheel is being prepared for draining the mine, which will be at work in the course of the summer.

Just as we were going to press, we received Capt. John Webb's report as to dressing the ore at Stanagwyn Mine, which recommends the immediate erection of a steam-stamps of 18 heads, at an outlay of about 1500*l.*, by which means he estimates a profit of 100*l.* a month may be realised, but without which, however, no good would arise from the present mode.

At Wheal Reeth two very fine courses of tin have just been cut; one in the 90, west of Unity shaft, and the other in the 160, east of engine-shaft.

On the Cornish side of West Wheal Russell they have a good and strong capel, with a beautiful branch of tin ore of excellent quality.

During the week shares have changed hands in Alfred Consols, Bedford United, Dolcoath, North Pool, North Basset, South Tolgus, Tamar Consols, Treleigh Consols, Treviskey, West Providence, Mary Ann, Tremayne, Wheal Trelawny, Cassandra Anne, Devon Consols North, Devon and Courtenay, Drake Walls, East Crowndale, East Wheal George, Great Sheba, Merllyn, Nant-y-Car, North Buller, North Tamar, South Tamar, Trebell Consols, Wheal Dora, Langford, Wheal Tom, Wheal Uny, and Wheal Zion, Trefusis, Lewis.

In Foreign Mines, transactions have taken place in Cobre, Santiago, St. John del Rey, United Mexican, and Worthing.

From the Alten Mines, advices have been received to the 30th July, one day prior to the month's estimate being forwarded. The progress, however, is highly satisfactory. At Raipas, the lode in the winze yields 4 tons of ore per fathom. At the Old Mine, Slungi's winze turns out from 3 to 3½ tons per fm. The lode in the shaft turns out 4 tons of ore per fm., and has a very promising appearance.

From Linares the advices are to the 9th inst. The lode has improved in the 55, west of Wilson's shaft, and now yields 3½ tons per fathom. The tributers throughout the mine are throwing up a considerable quantity of ore. Weighed in for the week, 49 tons 9 cwts.: total in stock, 730 tons 7 cwts. Pig lead, 23 tons 7 cwts.: total in stock, 246 tons 5 cwts.

The advices from the Copiapo Mines are to the 25th of June. Owing partly to the want of the reinforcement of European labourers, on their way to the mines, the yield of copper is less than usual—56 tons for May. For the last two years a very small quantity has been extracted from Checo below the 30; they have now a lode in the 50 about 1 ft. wide, of superior class ore, which assumes an important feature in that mine. At San Augustin adit level west the lode is 3 to 4 ft. wide, producing some very good ore. The silver mines are much as before, Al Fin Hallada yielding some very good quality ore. At Santa Ana, north of the south chiflon, they have a lode 1½ foot wide, the leader for 6 in. on the eastern wall superior class ore. The steamer brought home for the company 460 mks. of silver and a small ingot of gold, value altogether about 1000*l.*

From the Annotto Bay and Lignanea Mines, we have the report of Mr. Montgomery Martin, from which we have made copious extracts in another column. We entertain no manner of doubt that the ore found in Jamaica in large lumps, and stones of rich quality, come from regular veins there to be discovered; for as yet, it appears, a permanent metallic vein has not been found. The geology of the island presents every indication of a mineral deposit, equal in every respect to the Island of Cuba; and we see no reason why copper ore should be found so abundant at the latter, and only occasonal rich stones in Jamaica. To prove this is the object of the parties engaged in these undertakings; and we wish them every success. Six months' perseverance in the steps now pursuing will not entail a large expenditure of money. Agents, miners, and others have all an interest in striving for a good result, by a small per centage to be made upon the returns; and after some further progress, it may be advisable to call in the aid of an experienced mine agent, either from Cuba or Cornwall, to decide on what may be the best mode of working at a much deeper level than the present shallow surface explorations.

A box of specimens of copper ores has been received from the Worthing Mines. They are of a very promising character.

There is now little doubt of the existence of an extensive field of superior coal on a Crown grant of land at Matakana, on the east coast of New Zealand. Surface indications at the outcrop abound, and specimens collected from various parts of the property are exhibited on the premises of the proprietor, Mr. W. Greenwood, Queen-street, Auckland. It appears that Matakana is the most desirable spot for a coaling station in the whole colony, situated midway in the Gulf of Houraki: perfectly secure in its approaches, good anchorage, and deep water, it offers the greatest possible facilities for steam-boats or colliers to take in supplies. The questions under consideration are to ascertain the best spot for a shaft, and the capital to commence working, and it is proposed to raise 300*l.* by subscription to bore in two or three of the most favourable situations. If evidence is obtained of the existence of a vein which will pay for working, a company to be formed, such of the subscribers as are not willing to take shares to have their money returned with interest, and the subscription of those who will join a company to be taken as part payment. Should this exploration turn out successful, it will prove of immense importance, and raise the colony to a first-rate position among the islands of the South Pacific.

The most important district in which the workings for the precious metals in Mexico are carried on is still Guanaxuato, in which is the famous La Luz vein, worked upon to some thousands of varas, and still giving great riches. Up to 1822 the mines were worked by Spaniards only, but on the opening of Mexican independence, British and German mining companies entered the field, and who, unacquainted with the simple principles adopted by the Mexicans, laid out enormous capital in machinery, only to leave behind them immense sums of money. Thus, English companies worked Oajaca, Tlalpujhua, El Oro, the Real del Monte, the Bolanos, the Catorce, Veta Grande, and Valenciana, at an expense of $20,000,000; and the German American Company spent $2,000,000 on Anganguco, Temascaltepec, Christo, Chico, and Zimapan. The gold and silver production during the past year exceeds $30,000,000, of which Guanaxuato produced $15,000,000; Zacatecas and Fresnilla, $3,000,000; Durango and Chihuahua, $3,000,000; San Luis Potosi, $1,500,000; Jalisco, Sonora, and Sinaloa, $2,000,000; Mexico and Michoacan, $3,000,000. There are numerous veins of quicksilver, but only those in San Luis have been worked to any extent: 4000 flasks have been imported from New Almaden, California, and Rothschild's agent at Mexico has been obliged to arrange with the company to fix the price on the coast at $100 and $110 in the interior. It is expected to be lower yet.

IMPORTANT TO PURCHASERS OF SHARES.—In the Vice-Warden's Court, on Wednesday, a case was tried, in which Mr. Thomas Nicholls, jun., of Redruth, was plaintiff, and Mr. Joseph Stevens, of Redruth, defendant. Plaintiff had purchased of defendant five shares in North Tolgus Mine, for which he paid 100*l.*, and the action was to recover damages for non-transfer of said shares within a reasonable time. The defence was that defendant had done all in his power to get the transfer effected, the delay being occasioned through the occasional absence of the purser when called upon, and the delay of the plaintiff himself in not sending in the transfer until May, when the transaction took place on 22d February. The jury found a verdict for defendant.

RAILWAY CARRIAGES.—Mr. B. Heywood, of Manchester, has just patented some improvements in railway and other carriages, which consist—1. In making the windows with a single pane of plate glass without a frame, and having its edges rounded off to prevent injury to the cloth or other material with which the grooves for the pane to slide in are lined.—2. In lining the grooves in which the pane of glass slides with India-rubber, velvet, or other similar material, for the purpose of making a good joint.—3. In attaching the glass strings to such panes or windows of carriages, by means of a clip, to which the string is fastened, and which clip is secured to the glass by rivets or pins passing through holes bored therein, a piece of some flexible material being inserted between the clip and the pane of glass to prevent fracture of the latter when the pins are inserted.

IRON AND ITS ORES.—In reference to an article on Metallurgy, which appeared in the *Morning Chronicle*, Mr. John James, furnace manager for the Cwm Celyn and Blaina Iron-Works, has addressed the following letter to the Editor:—"Having noticed an article under this head in your Journal of the 2d inst., I shall be obliged by your inserting these few lines in explanation, with reference to the remarks made on my model of a closed-top blast furnace, now exhibiting in the Crystal Palace. I beg to say that a furnace of this description has been in successful operation for the last 12 months at the Cwm Celyn and Blaina Iron-Works, without any twisting of the ring or any other inconvenience to the well-working of the furnace, as you anticipate. The success of the invention I attribute to closing the furnace top with a cone, for the equal distribution of the materials around the furnace; this is a feature of the invention not noticed in your article. I have also to add that since the adoption of the cone for this purpose all doubts are at an end as to the difficulty of completely closing the furnace-top for collecting the gases, inasmuch as the Ebbw Vale Iron Company have since very successfully adopted the same principle, slightly modified. It is with much pleasure I state that the saving of fuel, labour, &c., is so great by so doing, that it must very soon command the attention of the trade in general."

New Patents.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

L. Faulkner, Cheadle, Chester, for certain improvements in the method of obtaining and applying motive-power.

J. Roberton, Oxford-street, Manchester, for improved methods of producing or obtaining printing dyes, and other substances used in printing, which improvements, in whole or in part, are applicable to other like useful purposes.

J. Walters, Sheffield, York, for certain improvements in knives and forks.

J. T. Jeffree, Blackwall, for an improved apparatus for facilitating the more perfect combustion of fuel, whereby funnels in steam-vessels and chimnies, or shafts for factories, may be dispensed with.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

Thurston and Co., Catherine-street, Strand, pool-marking board.—J. Page, Birmingham, universal portable worm cork-screw.—J. Whitehouse and Son, Birmingham, lock knobs.—R. Brightman and Son, Bristol, sportaman's boot.—J. Park, Bury, Lancashire, steam-boiler or generator.—J. Bonallack, Whitechapel and Holloway, staves and stays for van and cart bodies.

PROVISIONAL REGISTRATIONS.

J. C. Nesbit, Kennington-lane, guanometer, or instrument for testing the purity of guano.—J. Cook, Knightsbridge, portable mangle.—T. Newcomb, East-lane, Walworth, economic shadowless oil-lamp.—O. Deitz, Great Pulteney-street, mechanical blood extractor.—*Mechanics' Magazine.*

RAILWAY TRAFFIC.

The aggregate traffic on railways in the United Kingdom, published weekly from the 1st Jan. to the 16th Aug. inclusive, amounted to 8,958,652*l.*; corresponding period of 1850, to 7,815,075*l.*; corresponding period of 1849, to 6,848,258*l.*; and in 1848, to 6,127,187*l.*, showing an increase in 1851 over the corresponding period of 1850 of 1,143,577*l.*; an increase in 1850 over the corresponding period of 1849 of 966,817*l.*; and in 1849 over the same period of 1848 of 721,071*l.* The traffic receipts for the above period averaged in 1851, 1421*l.* per mile; in 1850, 1421*l.* per mile; in 1849, 1475*l.* per mile; and in 1848 they averaged 1633*l.* per mile. The traffic receipts on railways during the week ending the 16th August amounted to 359,747*l.*, being at the rate of 55*l.* per mile per week, and exceeding by 54,310*l.* the receipts of the corresponding period in 1850. The gross receipts of eight railways having their termini in the metropolis amounted to 177,462*l.* for the week ending as above, and for the corresponding week of last year to 135,537*l.*, showing an increase of 41,925*l.* The increase on the Eastern Counties Railway amounted to 1640*l.*; on the Great Western to 8335*l.*; on the Great Northern to 9845*l.* (chiefly in consequence of the line being in operation between London and Peterborough); on the London and Blackwall to 290*l.*; on the London, Brighton, and South Coast, to 2464*l.*; on the London and North-Western to 11,674*l.*; on the London and Southampton to 4160*l.*; and on the South-Eastern to 3517*l.* The aggregate increase as above was 41,925*l.*, being 77 per cent, of the total increase of traffic on railways in the United Kingdom, and leaving but 23 per cent. increase on the other railways, the aggregate receipts on which are about the same as those on the metropolitan line.

The concessionaires of the Western Railway of France paid the stipulated sum of 200,000*l.* into the French Treasury on the 20th inst., and formally took possession of the line.

LEAD ORES.

TICKETINGS FOR ABOUT 90 TONS FOXDALE LEAD ORE.

Bidders.	*Douglas, Isle of Man, Aug.* 19.	*Amounts Bid.*
Mather and Co. (purchasers)		£10 18 6
Newton, Keates, and Co.		10 16 0
John P. Eyton		10 13 6
Sims, Willyams, Nevill, and Co.		10 12 0
Thomas Somers		9 9 6
Tamar Smelting Company		9 10 0
Pontifex and Wood		8 11 6
Locke, Blackett, and Co.		10 7 6

TICKETINGS FOR ABOUT 100 TONS LAXEY LEAD ORE.

Walker, Parker, and Co. (purchasers)	£19 4 0
Mather and Co.	17 17 0
Newton, Keates, and Co.	18 2 6
John P. Eyton	18 13 6
Sims, Willyams, Nevill, and Co.	17 12 0
Thomas Somers	19 1 6
Pontifex and Wood	14 14 0
J. H. Meredith (trustee of the late J. T. Treffry)	18 0 0
Locke, Blackett, and Co.	18 10 0
W. J. Cookson and Co.	17 7 0

Mines.	*Tons.*	*Price per Ton.*	*Purchasers.*
Bronfloyd	10	£10 17 6	Locke, Blackett, & Co.
Herodsfoot	30	11 0 0	Sims, Willyams, & Co.
ditto	30	11 0 0	Newton, Keates, & Co.
North Wheal Rose	32	13 1 6	R. Michell & Son.
Cargoll	23	14 12 6	ditto
Oxanus	6	15 6 0	Sims, Willyams, & Co.
ditto	5	8 6 0	ditto
Frongoch	80	10 11 0	Panther Smelting Co.
Cwmystwith	60	10 8 6	ditto
Nanteos	35	9 14 6	Sims, Willyams, & Co.

COPPER ORES.

Sampled August 6, and Sold at Andrew's Hotel, Redruth, August 21.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
Devon Gt. Cons. } Wh. Josiah }	104	£5 16 0	West Caradon	77	£7 2 0
ditto	103	7 4 0	ditto	52	12 17 0
ditto	97	4 18 0	ditto	48	3 19 0
ditto	92	5 8 0	Marke Valley	95	3 17 0
ditto	89	5 6 0	ditto	91	3 13 0
ditto	86	5 2 6	ditto	23	2 5 0
ditto	85	4 2 6	ditto	17	2 15 0
ditto	81	7 4 0	Fowey Consols	82	6 8 0
ditto	77	7 0 0	ditto	79	5 14 0
ditto	73	7 15 0	ditto	59	5 11 0
ditto	70	5 2 6	Wheal Friendship	104	7 0 0
ditto	65	5 0 6	ditto	96	6 13 0
Wh. Fanny	105	4 8 6	Holmbush	80	3 18 0
ditto	102	5 6 6	ditto	72	7 15 0
ditto	91	6 8 0	Phœnix Mines	64	6 2 6
ditto	90	5 14 0	ditto	44	14 0 6
Wh. Maria	79	6 2 0	ditto	42	14 13 6
Wh. Anna Maria	87	4 16 0	Bedford United	72	8 15 0
ditto	55	13 4 0	ditto	69	4 9 6
West Caradon	95	6 18 0	West Wheal Jewel	61	6 10 0
ditto	78	7 0 0	Creeg Braws	40	4 4 0
			Wheal Gorland	12	6 0 0

TOTAL PRODUCE.

Devon Gt. Cons. Wheal Josiah Wheal Maria Wheal Fanny Wh. Anna Maria	1631	£9681 19 6	Wheal Friendship	200	£1361 12 0
			Holmbush	152	873 12 0
			Phœnix Mines	150	1625 9 0
			Bedford United	141	938 15 6
			West Wheal Jewel	61	396 10 0
West Caradon	350	2606 0 0	Creeg Braws	40	168 0 0
Mark Valley	226	796 8 0	Wheal Gorland	12	72 0 0
Fowey Consols	220	1302 11 0			

Average Standard ..... £95 6 0 | Average Produce 9¼
Average Price per ton £6 4 6
Quantity of Ore ..... 3183 tons | Quantity of Fine Copper, 299 tons 17 cwts.
Amount of Money £19,822 17 0
LAST SALE.—Average Standard ..... £102 4 0.—Average Produce 7¾
Standard of corresponding sale last month, 95*l.* 19s.—Produce, 8¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	140	£ 878 8 0
Vivian and Sons	545	3655 4 6
Freeman and Co.	379	1978 5 6
Grenfell and Sons	432	2331 11 6
Sims, Willyams, and Co.	424	2510 14 0
Williams, Foster, and Co.	825	6028 14 0
Schneider and Co.	229	1313 7 6
Mason and Elkington	209	1126 12 0
Total tons	3183	£19,822 17 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—United Mines 858—Par Consols 327—South Caradon 267—Tresavean and North Barrier 265—South Tolgus 257—Wheal Comfort 245—Treleigh Consols 120.—North Tolgus 33—West Tretheilan 17—Richards's Ore 12.—Total, 2401 tons.

Copper ores for sale on Thursday week, at White's Hotel, Pool.—Mines and Parcels.—Tincroft 736—North Roskear 625—Consolidated Mines 452—North Pool 439—Wheal Basset 327—Wheal Seton 308—Fowey Consols 223—South Wheal Frances 207—Wheal Unity Consols 89—West Fowey Consols 54—Crane and Bejawsa 32—Camborne Consols 13—Total, 3505 tons.

COMPARATIVE AVERAGES OF THE WEEKLY SALES OF COPPER ORES FOR NINE YEARS, TO THE THIRD SALE FOR AUGUST, 1851.

Years.	*Tons.*	*Produce.*	*Amount.*	*Standard.*	*Cop. Ore.*	*Price Cake Cop.*
1842	1804	8¾	£12,511 18 0	£108 11	£77 15	£87 to 89
1843	1562	8¾	8,824 6 0	99 7	67 6	78 to 79
1844	1938	7¾	8,894 6 0	102 16	66 16	83 to 84
1845	3099	10	21,705 15 6	97 13	67 19	88¼ to 91½
1846	3038	9¼	14,636 10 0	89 2	59 6	93 to 96
1847	2317	10¼	16,364 11 0	95 12	68 12	98 to 101
1848	2222	10¾	11,866 7 0	77 17	51 8	79½ to 82½
1849	3011	9¾	18,624 9 6	94 1	64 18	79½
1850	3244	9¾	19,922 10 0	91 19	63 11	84

At SWANSEA, for Sale 26th August.—Berehaven, 125, 124, 103, 99, 25—Santiago, 95, 90, 72, 52, 42, 45, 3, 2, 2, 1—Cobre, 77, 73, 60, 54, 50, 23—Cuba, 54, 43, 39, 35, 27, 22, 2—Montreal 56, 52, 39, 38—Spanish, 64, 60—Kaw-aw, 58, 30, 26, 4, 1—Knockmahon, 99—Wallah Wallah, 9, 1.—Total, 1976 tons (21-cwts.)

COAL MARKET, LONDON.

MONDAY.—Ships at market, 89; sold, 72.
WEDNESDAY.—Ships at market, 160; sold, 93.
FRIDAY.—Ships at market, 82; sold, 60.

VAUXHALL.—The SHILLING NIGHTS will commence on MONDAY. The director refers with the greatest pride to the unprecedented success his efforts have met with during the present season; and in order to meet the wishes of the many thousands of visitors from the provinces, and the foreigners sojourning in London, to visit the incomparable attractions of this magnificent establishment, he has determined on commencing forthwith the system of ONE SHILLING ADMISSION, pledging himself that the entertainments, in lieu of being curtailed, shall continue in all their brilliant variety. The services of all the eminent artistes have been retained, nor shall the slightest reduction take place in any of the departments, in proof of which, the two greatest Equestrians in the world—Hernandez and Mdle. Palmyra Annatto—Mr. Arthur Nelson, the extraordinary Pine-stick Harmonist—Arban's Great Band for Concert and Ball—Popular Vocalists, Mr. J. W. Sharp and Mr. Herbert—Madame Antonio's terrific Rope Ascent—Foucault's marvellous Fire and Water Sports—Brilliant Illuminations—Gorgeous Fireworks, &c. Admission, 1s. On TUESDAY, the most Brilliant Fete of the season, under the distinguished Patronage of the Foreign Commissioners, in honour of the Birth-day of his Royal Highness Prince Albert, when all the unparalleled performance will follow in their ordinary routine. Doors open at Seven. Fireworks at Eleven. Open every Evening, including Saturday. 48

NOTICES TO CORRESPONDENTS.

"T. P." (Exeter).—Although the powers acquired by tin bounders under the old Stannary Laws appear to be an invasion of the rights of property, still, on a full investigation, they will be found to give the owner every chance of developing the mineral wealth of his land himself, but securing it as a public advantage by other means, giving the owner a fair return in the shape of dues. In the first place, the land must be "wastrell;" or, if inclosed, it must have been anciently "wastrell," and bounded while so. Then, after cutting his turves, the bounder must proceed in the Stannary Courts, of which the owner has notice, and sufficient time is allowed before the bounder's title becomes complete, during which the owner may still intervene and preserve his rights, if he will but exercise them to the public benefit. If he abstain from interference, the law considers he has consented to the bounder's proceedings, and the usual "toll tin" may be a very sufficient and often profitable consideration to him for what he has given up.

"A Constant Reader" (Old Broad-street) should apply to Mr. Stride, the secretary of the Mining Exchange, who, if not able to explain the matter, would advise as to the best course to pursue. The circumstances, as stated, certainly appear suspicious.

COPELAND'S CARTRIDGES.—A letter from Mr. Rennie, of Bantry, says—"Mr. Copeland's shaft cartridges, in our ground, are exceedingly effective."

"O. P."—Messrs. Johnson and Son, of Waterloo-place, Commercial-road, are the manufacturers of Wetterstedt's patent marine metal. We shall have a descriptive paper, we hope, shortly.

"An Old Resident in India."—The railway proposed by the East Indian Railway Company, of which Mr. Macdonald Stephenson was the originator, was from Calcutta to Mirzapoor, a length of 450 miles, having to contend with great engineering difficulties—such as bridges over rivers two miles wide, with quicksands for their foundations, and shifting rivers—some seasons leaving their courses and forming others, whereby a railway would be swamped or washed away. The line advocated by the Great Western of Bengal Railway Company was from Calcutta to Rajmahal, 180 miles, without engineering difficulties—its terminus being on that part of the Ganges where the navigation becomes free from impediment up to Mirzapoor. The objection to this latter plan was the unloading and reshipment of goods at Rajmahal, and that steam vessels travelling 50 miles per day was not equal to the requirements of India.

"A Young Engineer."—Vignoles's lectures at University College, London, were originally published in the Journal, commencing in No. 27, 1841.

SIR,—In your last Journal allusion was made to Messrs. Snell in connection with certain unproductive mines, and in answer to an inquiry from a correspondent from East Wheal Crofty, it should be stated that Messrs. Snell were in no way identified with the workings, the success, or the want of it, in either Lostwithiel Consols or Ecton Mines.—*London, August 22.*

Mr. Hopkins is at his office in London, and may be consulted, or written to, on the subject of mines and mining—their prospects and intrinsic value.

THE SYPHON.—SIR: In the Notices to Correspondents, in your last Journal, it is stated, with reference to the action of a syphon, that "it is of no consequence, in a philosophical view, how long the legs of a syphon are, provided the ejection orifice is below the vessel or reservoir to be emptied;" and that "it is, of course, a matter of £ *s. d.*" This theory is so antagonistic to the generally received laws of Nature on hydrodynamic principles, that I presume it was intended to refer only to the length of the leg of the ejection orifice; for it is hardly necessary for you to be informed that a syphon acts entirely by atmospheric pressure, and that the leg inserted in the fluid must invariably be shorter than that of the ejection orifice, but in no case longer than from 32 feet to about 34 feet, as a column of water of that altitude is equal to a column of air of the same height. The water to be discharged is forced upwards in the shorter leg of the syphon by atmospheric pressure on the surface, owing to a vacuum having been previously formed in the tube by exhausting the air contained in it—the pressure of which being withdrawn, the fluid rises by the pressure on the surface, and will continue to ascend to the height of about 32 feet, but not higher, as it is evident that if the leg inserted in the liquid be longer than 32 feet, the weight of a column of water which it is capable of containing would be more than equal to the atmospheric pressure, and would, therefore, overcome it—consequently, it would never rise to the bent part of the tube or syphon. This principle has been so long known and admitted, that I think, in the hurry of the reply, the question was not considered with that critical acumen which usually characterises your judgment.—BENEVOLUS: *London, August* 18.

Note.—The above is so lucid a philosophical explanation of the action of the syphon, that we readily insert it. In writing the notice alluded to, it was never intended to imply that the short leg would exceed 33 feet—a column of water about equal to that of the atmosphere; but the case in point being considerably under that length, the particular law of fluids above described was not entered into, or considered necessary; of course, the length of the longer leg was unimportant, provided the necessary conditions there explained were observed.

CAMBORNE CONSOLS.—Our correspondent, "Enquiry," further observes, respecting this mine, that, as a small shareholder, he is glad to find an early meeting is to be held. The annual meetings used to take place in February, but the last February, and months since, have come and gone without the adventurers being called together. The writer says he is no caviller, but a stickler for consistency, and considers Mr. Daniell's letter in the Journal of the 2d inst., in conjunction with his former letters, so extraordinary, that he cannot help noticing it. He then quotes extracts from Mr. Daniell's reports in the Journal since January, 1850, in which it is continuously stated that ore was being raised—that stoping ground was being laid open, and implying that the mine was paying cost, and that ore would be soon sold monthly, to the value of 250*l.*, with an outlay of 100*l.* As a small shareholder, he says he cannot yield to Mr. Daniell's impeachment, that "if the mine is mismanaged, it is by the shareholders," and wishes to know if there has been so much ore in sight, what has become of it?

"K." (Loughborough).—There is no such mine as *Old* Wheal Russell. We suppose our correspondent of last week added the adjective to distinguish it from the two of more modern creation. The original Wheal Russell was a large sett adjoining south to Bedford United; a portion of the western part of the sett was, in November last, united to the eastern portion of Drake Walls ground, and named West Wheal Russell, under the management of Mr. Stainsby, Salvador-house. Another portion of the sett is being worked by Mr. Murchison's company, under the name of East Wheal Russell; and these three mines will be found in our Share List—Wheal Russell, West Wheal Russell, and East Wheal Russell.

"Agenon."—We cannot see the object of the letter, which, besides, is written in a very objectionable style.

A POOR MINER CLAIMING A SETT BY INHERITANCE.—We believe, without exception, every lease contains a clause, rendering the sett liable to forfeiture if the lessee ceases to work his mine in a proper manner after reasonable notice, and it is but right that it should be so, or the landowner, as well as the public, would be deprived of the profit to accrue from the development of the mineral contained beneath the surface. The custom is very ancient: in the register of the Black Prince, preserved among the public records, there is a writ, 25th Edward III., reciting that tinners claiming any interest in tin works, and neglecting or refusing to work or contribute to the working, forfeit their share by ancient usage, and the proper officer of the Duchy is commanded to enforce compliance with the custom.

Our friend at Camborne is informed that the sett he refers to comprises the lands of Carwynnen, adjoining the sett of Wheal Grenville, and near Tolcarne, Camborne.

The Cost-Book System.

Having repeated applications for particulars respecting the Cost-book System, we have reprinted, as a pamphlet, the paper descriptive of its principles and practice, which appeared in the *Mining Journal*. Copies can be procured through any bookseller or newsman, or at our office, price 6d.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

*** It is particularly requested that all communications may be addressed—
TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.
And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, AUGUST 23, 1851.

THE MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

In the advertising columns of the MINING JOURNAL there has during the past three weeks, appeared an announcement from the Museum of Practical Geology, that a series of lectures and practical demonstrations will be commenced on the 6th November, arranged under a plan matured by the Government for the formation of a School of Mines for instruction in mineralogy and practical mining, the programme of which has just been issued. This document states that the importance of the mineral wealth of the United Kingdom far exceeds that of any other European State, and furnishes four-ninths of the raw mineral produce of all Europe; and although this important staple returns annually about 24,000,000*l.* sterling, and the labour employed in its extraction represents a much larger sum, no place of education or study having for its special object the peculiar training of persons engaged in mining operations has yet been established in the kingdom, while mining schools have long existed in France, Russia, Prussia, Saxony, Austria, Spain, Sweden, Denmark, and other European states, having less connexion with mining; and so well have they been found to operate that the respective Governments have taken measures for a still further development of the resources of these establishments. Such institutions have long been required here, and their want has been much felt; memorials have been presented from all the mining districts urging the fact, and suggesting the desirability of converting the Museum of Economic Geology into a practical mining school. In consequence of these applications and representations, the Government have determined to apply the resources of the establishment to public instruction in mining, and in the application of science to the arts. The collections of the museum are in a condition for educational purposes, and systematic studies may be advantageously entered on under the several professors in the laboratories and working rooms in chemistry, metallurgy, geology, palæontology, mineralogy, and mining. Although it is intended to give general instruction in science to those who require elementary knowledge, the chief object will be to give a practical direction to the course of study, to enable the student to enter on the actual practice of mining with advantage. The Geological Survey, being carried on in connection with the museum, has afforded great facilities for making complete collections illustrative of the application of geology to the useful purposes of life. The Field Surveys are carried on in the localities, under examination for the time being, and it is contemplated to communicate instruction in the field in the various departments of geological surveying under the mining, the geological, and the palæontological professers. The office superintended by Mr. HUNT is for the deposit of mining records: the too general absence of these documents led to its establishment, and numerous copies of plans and sections of mines, with many interesting details, are now deposited, and are weekly increasing. There are two laboratories, one superintended by Dr. LYON PLAYFAIR, and the other by Dr. PERCY. In the department of Natural History, under Professor E. FORBES, the organic remains of the British islands may be studied to advantage; and as the relative age and sequence of geological formations are determined by the fossils they contain, this is an exceedingly interesting and important one. The programme then gives an explanation of the courses of lectures to be given during the first session, their general bearing, and the order in which they will occur, and we have no doubt they will prove of a high character, commensurate with the talent to which they have been entrusted. We hope at a future day to have to congratulate the mining interest on this step which the Government has taken, and that the School of Mines will prove a great national benefit, by disseminating useful information and encouraging mining pursuits.

Before commencing the continuation of Mr. TREMENHEERE'S report, detailing information of the mining districts of the north of England, we shall shortly again refer to the odious truck system, merely to lay before our readers a series of proposed alterations in the several clauses of the Truck Act, which, in the opinion of the executive of the Anti-truck Associations, would render it much more effective, enable the authorities to administer the law with more independence and decision, and put a stop to those mean, paltry, and disgraceful evasions of its enactments which now daily take place. It is proposed that part of the 8th section, which legalises payment in cheques, be repealed. The Act clearly means only cheques upon a banker, to be changed for cash; but the truck masters take advantage of the word, and give "checques" upon the truck shop. Secondly, to obtain the insertion of a clause to prevent the payment of wages in any retail provision shop, or premises attached, similar to the clause prohibiting payment in public houses. Thirdly, by the present law, if a colliery proprietor lets the getting of the coal to a butty, the latter carries on an extensive truck system, but being mere men of straw are rarely worth legal proceedings, a clause should be introduced, making in all cases the owners liable for the payment of money wages. Fourthly, any person or employer threatening with discharge a workman for dealing at a particular shop, or endeavouring to coerce him to deal at another, might be made amenable. Fifth, that the amount of penalties should be increased, and a certain portion, or even the whole, go to the informer. Sixth, that the period within which informations may be laid should be extended to six months. Seventh, that masters should be compelled to pay wages weekly. Eighth, that the trades of builder, timber merchants, railway, canal, and other contractors, and common labourers should be included.

We now proceed to the general report of Derbyshire, Northumberland, Durham, &c. In the first of these counties we are happy to find from its details that a similar improvement in the population has taken place as in Staffordshire. JOHN SMITH, 42 years a collier and agent under the Butterley Park Company, states that a rapid change for the better has taken place in the intelligence and morals of their young men. From 150 to 200 were pressing him to establish a library, and were ready to subscribe to it. Mr. TREMENHEERE considers the habits and intelligence of Derbyshire very superior to those of South Staffordshire.

In the districts of the extreme north the report commences with Mr. BEAUMONT'S lead mines in East and West Allandale and Weardale, in Northumberland and Durham, employing upwards of 2000 men and boys, and who at these mines are said to raise 1-10th of all the lead produced in the world. A liberal and enlightened management is here evident: the miners' cottages are large and substantial, generally having a piece of ground attached, often sufficient for a cow; and the average earnings of the men are 15*s.* per week throughout the year, with much leisure time. There are three libraries and miners' reading-rooms, which are well frequented, and a taste for instruction and rational amusement has grown rapidly with the opportunity. The great evil of taking the children from school at an early age prevails to a great extent in the north. It is in evidence, from a mine agent of great experience, that most of the boys lose nearly all they learn at the day school by leaving so early. They have little encouragement to stay longer, and few inducements to attend evening schools, as they do not feel that places of trust at the pits will ever be given as rewards to the most intelligent and best-educated. This may be taken as the key to the present condition of the colliery population, and to point out the way to improvement. This portion of the report thus concludes:—

The boys are taken down the pits at 10 years of age, some probably, notwithstanding the Act, before. From that time until they are able to earn men's wages (about the age of 18), they are, I understand, at work below ground usually from 12 to 13 hours, employed in drawing the coal or driving the horses, so that they are generally absent from home 13 or 14 hours. The colliers themselves, being able to do their work in six or seven hours, and consequently being seldom, of necessity, absent from home more than eight hours, it must follow inevitably, from this state of things, that the little learnt at the day school must, in most instances, be lost before the age of 18, the boys in general being indisposed to attend evening schools after so many hours labour in the pits; and that more attention must be paid to adult evening schools, and to offering some tangible inducements for mental improvement at that age, than has hitherto been thought necessary. Looking at the matter in that light, the Rev. Mr. Grey has signified his desire to contribute his full share towards supplying this want in his important parish, by volunteering to take upon himself a large portion of the cost of maintaining a schoolmaster expressly for an evening and adult school, as described in this report in reference to the Messrs. Chance's works in South Staffordshire, such master to be capable of teaching the higher branches of instruction that have especial reference to the occupations of overmen and underground agents. It is very much to be hoped that Mr. Grey's liberal offer may be properly seconded by the leading proprietors of the parish and neighbourhood, and that the addition of a reading-room may be made, where opportunities may also be given for the cultivation of vocal and instrumental music. At the large neighbouring village of Hetton, Mr. Nicholas Wood, in conjunction with the other proprietors of the Hetton Colliery, caused a reading-room to be opened in January of last year. It has been much used by the agents and the more intelligent of the colliers, and it will doubtless by degrees attract those who have hitherto been less disposed to intellectual gratifications. Mr. Wood expressed his intention of forthwith recommending that the schools in connection with the large population attached to that colliery should be put on a better footing; that a new school-room and reading-room should be added, and evening schools encouraged. Mr. Morton, on behalf of the Earl of Durham's collieries, intended to open a reading-room at the village of Sherborne, where there are about 500 colliers' houses. Mr. Hindhaugh proposed building a new school-house in addition to those already provided for the collieries of the Marquis of Londonderry. I might enumerate several other projected additions to the means of education and general improvement by the leading persons in these two counties; and, indeed, such clear views prevail of the importance of following up the work that has been begun, that it is to be hoped the time is not far distant when some further valuable efforts will be made, not only to reach the children at the existing day schools, but to bring within the influence of sound and useful instruction the youth of both sexes, at the critical period which at present is left unprovided for by any effectual means of moral guidance or control.

In reporting on the state of the colliery districts of Ayrshire and Lanarkshire, Mr. TREMENHEERE particularly dwells on the works of Messrs. BAIRD, at Kilwinning, where great improvements have been made in the course of a few years in perfecting roads and drainage. A school also was lately opened, and was immediately attended by about 200 children. In commenting on the injurious consequences of strikes, it is observed—

Experience has abundantly shown that, while the success of all this skill and the profits of all this capital are allowed to hang upon the caprice and self-will of a defective moral and intellectual agency, that can neither be reasoned with nor controlled, a miscalculation is made, far more injurious in its commercial consequences than any error in the department of the physical sciences that could by any probability occur in their branch of manufacture. No persons have taken more pains to correct this evil than the largest makers of iron in the district—the Messrs. Baird, whose zealous and liberal promotion of everything contributing to the improvement of the population I have frequently had occasion to notice. They are amply rewarded in the general steadiness and good conduct of their workpeople at Gartsherrie, who rarely give them any trouble by joining in strikes, or by any other forms of insubordination. They continued working during the whole of the strike above mentioned, and doing a full day's labour, the Messrs. Baird protecting them from molestation by an adequate police force. The total population in their houses at Gartsherrie, taken in December of last year, amounted to 2016; that number were, therefore, saved from the privations and all the other ill consequences that a strike occasions. A strict superintendence is kept over the houses, and overcrowding is, as much as possible, prevented. The number of houses being 385, there are, consequently, 5·236 persons to a house—only one lodger is allowed where there is a family. Since last year, water from the Airdrie Water-Works (upwards of three miles off) has been very considerately, and at much cost to the Messrs. Baird, introduced into all these houses. The contrast is great between the neatness and cleanliness of the roads, drains, and the wide and open spaces between the houses, compared with what was the case a few years ago. Strips of grass are laid down for drying clothes upon, &c., and within good sized gardens are laid out, and a fine is imposed on whoever neglects his allotment. One displayed much taste and care: I was informed it belonged to an Irishman. The whole aspect of these gardens may be taken as a proof that a little encouragement only is needed to make this very desirable source of interest and amusement more general among the colliery villages. A few trees had been planted, sufficient to show how much cheerfulness and variety might be given to these large squares at a very trifling cost.

It remains to record the following statement of one of the managers of the Messrs. Baird's works, as to the result to them, as manufacturers, of their liberal expenditure in the promotion of moral and intellectual improvement. It is a statement, also eminently deserving attention in South Staffordshire:—"We have 65 coal and ironstone pits, each of which requires three men in responsible situations—viz.: the hill-man, and two overmen, in all near 200 men of that description; 15 years ago we could not get men whom we could trust as fit for these situations, it was the greatest difficulty we had. We now not only supply ourselves, but a great number of the neighbouring collieries have been supplied with superior men who have been brought up with us. We frequently also are called upon to recommend young men for situations in other iron districts. The person who is now in charge of the Eglington Iron-Works was brought up here as a collier. At least 20 young men now in good situations as engine-men, &c., on the railway, were bred at Gartsherrie. We employ in our collieries and ironstone pits, on an average, about 1800 to 2000; consequently, about 1 in 10 may look to situations of trust with us, besides those whom we recommend elsewhere."

The Messrs. Murray, of the Monkland Iron-Works, employing about 4500 people, expressed the opinion that the young men were beginning to be more accessible to reason in regard to strikes. During the whole of the last, many of their men continued to work, notwithstanding the intimidation and violence to which they were subject, and which the measures taken for their protection could not always prevent. The Messrs. Murray have seven schools attached to their works, attended by nearly 2000 children; also evening schools at all the boys' schools, each having an attendance of from 40 to 70 every evening. There are four circulating libraries and reading-rooms, in which many of the best London and local papers and periodicals are taken in. Instrumental music is much cultivated, and three bands have been formed among the workmen. The best effects are said to be visibly proceeding from the female schools, the habits learnt at which have been observed to produce very favourable changes in the comfort and cleanliness of many of the cottages. An instance of the injurious nature of the strikes and combinations that are prevalent in the local districts was mentioned to me in reference to one of the largest works in this county. About the period of the strike of last summer an order was received by the Messrs. ——— for 4000 tons of iron, to be delivered by a certain day. In the then temper of their men they did not think it safe to accept the order for more than half the quantity, to be delivered the first 1000 tons at the expiration of one, and the second 1000 tons at the expiration of two months. On learning that this contract had been taken, the men made a demand of an additional rate of wages, which could not be complied with. The consequence was that the first 1000 tons not being ready at the day mentioned, the intended purchasers refused to accept them. The remaining portion only of the order was, therefore, executed. By this one proceeding the men lost all the wages which they might have earned, at a fair rate, on the whole process of rendering marketable 3000 tons of iron, and the masters lost the profits. This is probably a fair example of the extent to which the men, the masters, and the public suffer from the want of a proper understanding between the two former.

The report closes by some apposite remarks on female education. The ironmasters and others, on becoming conscious of the necessity of providing schools, have almost entirely directed their attention to the rising male generation; while the improvement of the female portion has been much neglected, their education having been confined to general, moral, and religious instruction. There is wanted some special provision for exclusive female branches of education, by which the manners of the female children might be softened, their habits improved, and their minds prepared for their own peculiar duties in after life. It is, therefore, suggested that a matron to each school might convey this instruction in a room attached to the school during those hours the girls were not learning under the master—her duties being to instruct only in needlework and general female domestic duties.

We alluded, in a recent Journal, to the prospect of having railways introduced into the Cape colony. The advantages of railway communication to all countries is now universally admitted, and as one of the most effective agents in promoting improvements, it is particularly desirable in such extensive districts as those embraced within the colony of the Cape of Good Hope.

The Cape colony stretches for a length of about 700 miles, from Cape Town at one extreme to Kaffraria at the other, having boundless tracts of excellent land lying between. To such a country railway communication must be of the greatest importance, if not absolutely necessary, for the proper development of the great natural resources—mineral, agricultural, and commercial—with which it abounds. We learn, therefore, with great pleasure, that the first division, commencing at Cape Town, and running thence towards Graham's Town, about 70 miles long, is about to be commenced by one of the most eminent English firms connected with the railways of this country and the continent. This section being very easily made will be shortly completed, after which another of about equal extent will be commenced, and so on until the two extremes of this extensive colony shall be connected by one unbroken line of railway. This is the true way to improve our colonies, and to relieve ourselves.

It is with extreme reluctance that we feel called upon to allude to the "COMPANY OF COPPER MINERS IN ENGLAND;" but as this association has attained for itself, during the last few years, an unenviable notoriety, we should be wanting in our duty to the public if we did not make a few remarks on the late proceedings of the Shareholders' Committee. On their appointment, it was, we believe, generally understood that so soon as the plans for the resuscitation of the company were matured, they should resign. At the same meeting, Mr. PELLY, the deputy but *de facto* governor, stated that the Court of Assistants did not wish to retain office longer than the period when the settlement of affairs should take place. After more than two years' delay, at length they have obtained, through some means or other, their "Creditors' Bill," and can now legally convert their stock and pay their just debts by a *pro ratâ* scheme, which forces those unfortunate people who have trusted in the good faith and honesty of the company to become partners in their insolvent property. We have not heard, as yet, of any resignation, or the intention of so doing; but, immediately after the bill was obtained, a private meeting of the shareholders was called, when Mr. LORD, one of the committee, was displaced, and the name of JOHN HENRY PELLY, Esq., substituted in his stead. It may be in the recollection of our readers that Mr. LORD had rendered himself obnoxious to the Court of Assistants, inasmuch as by his exertions they were prevented from sacrificing the property to the Bank of England; and had it not been for his energetic opposition to their interested and erroneous views, the wreck they have, would not have been preserved. It was a capital *ruse*, no doubt, to gull Mr. LORD by placing him on the committee, so as to disarm opposition, which, no doubt, would have been highly disagreeable to the promoters of the "Creditors' Bill." Now that dishonesty is legalized, Mr. LORD'S, or any other shareholder's opposition, is fruitless. One of the first steps of the new self-constituted committee has been to appoint one of their own body, in conjunction with another individual, to inspect and report on the property. The necessity for this (unless it is to make a job) we cannot see, as the property, during the last two years, has been advertised for sale, and valued by competent parties. The last time it was put up to auction was in July, 1850. No real benefit can result from this inspection, as the shareholders know as much about the capabilities of the property now as they will do when enlightened by the elaborate report which, no doubt, will be duly ushered before them. No investigation was, in our opinion, necessary; the capabilities of the property were known to be good, the mode of management the reverse: their bill is obtained, and they are about to start *de novo*.

The Court of Assistants have no available funds either to pay their creditors or reward their friends; the inspection and the report, probably, will be supposed of service to the new shareholders, and may recompense those who have exerted themselves to bring the affairs of the company to their present prosperous and encouraging position (?) But one little obstacle remains to insure prosperity for some time, that is "capital;" and however flourishing the report may be, and we have no doubt *coleur de rose* will pervade it, we are much mistaken if, on looking at the bill, considering the antecedents of the company, any one will subscribe to this *pro ratâ* scheme while the present Court of Assistants, who have by their misma-

nagement plunged the company into difficulties, continue to be the governing body. Public patience and endurance may be exhausted; and although they have been at present so fortunate, it is not to be expected that every seven years they will be so lucky as to obtain a bill by which they can convert a sovereign into half-a-crown, and oblige their trade creditors to become partners in a bankrupt stock.

Mr. EDWARD PERRY, the tin-plate manufacturer at Wolverhampton, has published a long letter in the *Daily News* of Wednesday last, fully explaining the conduct of his refractory workmen, who were induced to strike by the secretary of the National Association announcing to them that all the tin-plate workers who left their employment should receive 12s. 6d. per week, although then getting 1*l.* 18s. 1½d. a man. Mr. PERRY authoritatively states that adult tin-plate workers may, without overtoil, produce on an average 2*l.* a week a man—that in Wolverhampton there are six tin-plate manufactories, his being one of the most extensive—that for a series of years he has paid the same rate of wages, though provisions have in that time fallen nearly 25 per cent.—that the reason they do not ordinarily receive thus much is solely attributable to their unfortunate propensity to waste a considerable portion of each week in idling and drinking—that in April last he received from London an official letter from a party calling themselves the "National Association of Trades Unions," signed WM. PEELE, secretary, intimating that a deputation would shortly pay him a visit. Similar letters were received by the other five houses. In regular course the deputation made its appearance, accompanied by four of his workmen. They explained to him that they represented a great society, having Mr. T. S. DUNCOMBE for its president, with 20,000*l.* in hand to support its policy, and required him to adop the "book of prices," which they came prepared with. He (Mr. PERRY) refused to submit to any such dictation; war, therefore, was proclaimed against him and the other five companies, which was carried on in a most unscrupulous manner. Wolverhampton was placarded with scurrilous songs and libellous publications. The seduction of workmen and abduction of apprentices followed, by which means three-fourths were lured away, tin stolen, tools missing, and patterns destroyed.

Mr. PERRY has ultimately succeeded in punishing some of the ringleaders who thus misled his men, and received back those who had been misguided. He has thereby asserted and vindicated freedom of labour, without vindictiveness for the injuries he has been made to suffer. It is, however, melancholy to notice that the honest and labourious workmen in our manufactories are still so much under the control of such mercenaries as those alluded to, subjecting a part of the wages earned by the sweat of their brow to enable others to plot, scheme, and live, to their injury and loss; and we are unable to account how Mr. T. S. DUNCOMBE can lend his name for one moment to such an association, in direct manifest violation of Divine rule, and derogatory to all sense of justice.

Having fully exposed this vile system in our Journal of the 23d Nov. last, we need on this occasion make no further remark, having already shown our utter detestation of such malpractices.

In some remarks, which we felt called upon to make in our last Journal, on the management of the Worthing Mining Company, we alluded to another Australian Company, contrasting the expenditure of the two, which comparison resulted much in favour of the former. It would be evident to all interested that the Australian Mining Company was the undertaking alluded to; and it is but justice to state, that from the change which has now been effected in the executive the management will undergo a complete revision, and the state of affairs be placed on a very different and much better footing, both at home and abroad, from the more vigilant attention to its affairs which will be paid by the new directors, lately elected, and the appointment of Mr. JEHU HITCHINS, so well-known for his mining talent and strict integrity, who is now *en route* for the colony.

At a late hour in the night of yesterday week, the coroner's inquest on the five victims who were killed at the Malago Vale Colliery, near Bristol, by the breaking of the rope, as noticed in our last week's MINING JOURNAL, terminated in a verdict of manslaughter against Mr. MOSES GILDEROY STEWART, the manager of the works, and Mr. HENRY PILLINGER, the bailiff, who were accordingly committed under the coroner's warrant, and immediately taken into custody. As these individuals are now amenable to, and will have to answer for, their alleged neglect before a criminal tribunal of their country, we will not prejudge their case by any hypothetical remarks as to what may be the result; but the evidence adduced before the coroner's inquest having been publicly given, we may fairly, and without a shadow of injustice, recapitulate its principal features as influencing the jury to record so apparently severe a verdict. Happy should we be could the conduct of the manager and his bailiff be looked upon in a more favourable light, but if the evidence generally did not show an utter carelessness and recklessness about the good quality of the ropes employed, and consequently the lives of the men when ascending and descending, there has evidently been a system of oppression and tyranny at work, which prevented the men from complaining when they saw real danger before them, through fear of being discharged from their work, and thus losing the means of earning their daily bread for themselves and families.

In addition to the evidence to this effect, given in our last, by WATTS and SMITH, who said they should lose their work for what they had said that day, many other colliers, as well as practical ropemakers, spoke to the insufficiency of the rope. WILLIAM BINDING deposed that about 12 months since he worked at the Malago Vale Colliery, and the rope broke in bringing up a load of coal. He complained of it to Mr. EDWARD REYNOLDS and to NEWMAN, a bailiff, declaring he would not go down by the rope till something better was done. He also told the men they had better go to the counter and complain. When witness spoke, NEWMAN said—"Thee hast got too much mouth; thee shan't go in again," and he was discharged at once in the presence of Mr. REYNOLDS. The reason of his discharge was well known to the other men, but could not say whether they were thereby intimidated. He had been taken on again, but always felt afraid to say anything, although about a fortnight since he saw a faulty place in the rope, and spoke of it to a companion. JAMES PARSONS deposed that he was in the pit when the accident took place. Before he went down in the morning he complained to PILLINGER that the rope was bad; two of the men, since dead, were in the bucket, but they got out to lighten it, when PILLINGER said—"Never mind, you won't have long to wait." He had heard the rope frequently complained of, and had remained out of work for 14 weeks, through fear of his life in going up and down the shaft. He could get no work elsewhere, and was compelled to return. JAMES HALE, collier, had been afraid of the rope for a fortnight past—had complained of it to ELLIS, the banksman, in PILLINGER's presence, who took no notice. The splice was not wide enough, and the rope had been *shaved off to meet it.* Other evidence fully confirmed the fact that great negligence had existed—that the men dared not complain; and upon such evidence the jury delivered that verdict, which will illicit still further inquiry. The case is a highly important one, and we trust it will lead to results which will prove advantageous to the working colliers generally, by stimulating managers and bailiffs to a little more exertion in their endeavours to secure safety to the men in their various avocations. Here we have one of the deepest mines in the kingdom—a shaft 1440 ft. in perpendicular depth, requiring a rope of enormous strength, and, indeed, peculiar make, to render it moderately safe—treated as if it were an ordinary mine, of a few fathoms only beneath the surface; and the manager with unlimited powers delegated to him by his employers to adopt any necessary measures for the safety of the men, and the proper working of the mine, at least, careless of what might be the consequence, and leaving to be done by others what it was his undoubted duty to attend to himself. Another serious question arises out of this unhappy case, as affecting the proprietors themselves: there are, as our readers are aware, means at hand to prevent loss of life or serious injury, even when a rope does break. FOURDRINIER's apparatus is getting extensively into use in the collieries of the north; and after three years, since it was first employed, although many cases of fractured ropes have occurred, not a life has been sacrificed where this machine has been in use. Why it is not universally adopted, colliery proprietors must answer for themselves.

Since the inquest, Mr. DICKENSON, one of the northern inspectors, has been sent down by Government to examine the collieries of the Bedminster locality (Mr. KENYON BLACKWELL having resigned). He found generally a want of plans and insufficient ventilation; but it is only justice to say, the proprietors in every case agreed to adopt the inspector's suggestions.

We have unhappily again this week to record two more of those calamitous visitations which so often desolate a colliery district, and carry with them wretchedness and despair into a whole community; one was an explosion which took place on Monday morning last, at the Ubberley Colliery, in the Potteries, by which seven lives were lost, and the other, which occurred in the night of the same day, has been the most disastrous we have had for many months to notice. The Washington Colliery, about two miles from the Washington Station on the York, Newcastle, and Berwick Railway, was the scene of the latter calamity, and has resulted in the death of between 30 and 40 individuals, most of them in the full vigour of youth and health. It appears that, between 4 and 5 o'clock, about 60 men descended to their work, and, about 11 at night, the neighbourhood was alarmed by a tremendous explosion, when numbers rushed to the scene of destruction. The head overman, with several others, descended, and found the explosion had taken place in the whole workings, where about 40 men worked: the 20 who were in another part of the pit were uninjured. The after-damp was so powerful that it was some hours before any of the bodies could be extricated; and we regret to say that two furnace-men, anxious to relieve their comrades if possible, descended almost immediately after the explosion, and were brought up insensible from the effects of the carbonic acid, one of whom has since died, and the other's life is despaired of. Up to 7 o'clock the next evening, 30 bodies had been brought to bank, and the harrowing and heartrending scene witnessed may be imagined but cannot be described;—wives, sisters, and mothers, writhing in agonizing despair as body after body was deposited on the grass. The cause of the explosion can at present only be surmised, but rumours are afloat that it was a very badly ventilated colliery, and that, for a fortnight past, fears have been entertained of some such catastrophe. The resident viewer and part owner, Mr. CROUDACE, was in London, on a visit to the Great Exhibition; and Mr. DUNN, the Government Inspector of Mines, was also in London, where he had gone to lay his report before Government.

The case at Ubberley presented another instance of that reckless spirit which so peculiarly marks the collier's character. RALPH HANCOCK, a butty collier, took with him a safety-lamp, but was followed close at his heels by the other six with naked candles, and had only entered about 60 yards when they paid for their temerity with their lives. The inquest was held on Wednesday morning, when Mr. WM. HARDING, the coroner, took occasion to remark on the conduct of Government on these occasions; although, since the passing of the Act, he had in every instance forwarded timely notice to the SECRETARY OF STATE, no further notice was ever taken than a formal acknowledgment of his letter; and while the evidence was being taken on this occasion, the following communication was received:—

Whitehall, August 19, 1851.

SIR,—I am directed by Secretary Sir GEORGE GREY to acknowledge the receipt of your letter of the 18th instant, reporting an accident attended with loss of life, which occurred at the Ubberly colliery.—I am, Sir, your obedient servant, H. WADDINGTON.

Thus, then, it appears that Sir G. GREY and his colleagues look upon the Act of Parliament as a mere piece of formality, nor in the very worst cases will they take the least pains to adopt measures for promoting inquiry and furthering the ends of justice. Inquests take place just as before, the bodies of the victims are given to the earth, others take their place with every prospect of sharing their fate, and for a time all goes on as usual, until another explosion arouses the neighbourhood, and the same dull routine is repeated. The coroner dwelt strongly on the absence of an inspector, who might have investigated the cause of the explosion; and said that the Act was useless, and the conduct of the SECRETARY OF STATE officials inconsistent, while, if properly carried out, it might be made most useful. From the evidence, it appeared it was a rule strictly enforced by the proprietors that a butty collier should go down every morning with a safety-lamp to see that all was in good order before a man went down to work. The ventilation does not appear to have been bad or neglected, but the weather had changed, a continuous eruption of gas had probably been going on during the night, and had HANCOCK gone alone with his lamp, as he should have done, the state of the air would have been discovered, and the seven men still among the living. The jury, after about a quarter of an hour's deliberation, gave a verdict, "That the deceased came by their deaths at the Ubberley Colliery accidentally," and accompanied that verdict by an expression of regret that the inspector had not been sent down to investigate the cause of the accident.

The inquest on the bodies at the Washington Colliery was also commenced on Monday, when, from the evidence of Mr. CROUDACE, the owner, it appeared there had been an explosion three months since, which killed two men, and since that a slight one, which injured nobody. From 28,000 to 30,000 feet of air per minute passed through the workings; the quantity passing on Monday in that part where the explosion took place would be 7000 or 8000 cubic feet. One witness, JAMES BIRD, said he was afraid from the symptoms given by the candles that the pit would fire, and left work just before the explosion. He cautioned HALL, the underman, and others, but they would not leave, and tried to persuade him to stop, but he would not, and escaped. FINNEGAN, TODD, and HALL, the latter the father of the underviewer, also gave similar evidence; they were sure the pit would fire, left work, and escaped. The inquest was adjourned until Wednesday next, and Mr. M. DUNN (the Government inspector) is to examine the colliery the day previous,—the result of which will appear in our next Number.

In the MINING JOURNAL of 5th July last we gave a description of a new machine for blooming iron, the patented invention of Mr. BROWN, late of the Oak Farm Iron-works, with the various opinions expressed by engineers in its favour, on a discussion of its merits at a meeting of the members of the Institution of Mechanical Engineers, held at the Society of Arts. A law suit, arising out of the sale of one of these machines, has just been tried before Mr. Justice ERLE, and a special jury, at the Gloucester Assizes, which, from the nature of the evidence, would lead us to imply that the defendant was exceedingly fond of law, and would rather trust to its "glorious uncertainty" for a favourable verdict, than pay the whole debt; while he could not show the slightest just cause for a diminution of plaintiff's demand. His own counsel virtually acknowledged he had not a leg to stand upon. The action in which Mr. BROWN, the patentee, was plaintiff, was to recover of the defendant, Mr. JONES, an extensive iron-manufacturer at the Spring Vale Works, near Wolverhampton, the sum of 224*l.* 10s., part of the purchase-money for one of the new machines. Mr. Sergeant ALLEN and Mr. KETTLE were for the plaintiff; Mr. KEATING and Mr. WHITMORE for defendant. Mr. Sergeant ALLEN having explained the machine and its action on iron as far superior to the hammer, stated that defendant having heard of the machine, went to plaintiff's premises and inspected it at work, taking with him a specimen of good and bad iron. He tried the inferior iron first, and was so satisfied of the action of the machine, that he declined to try the other. After this, a correspondence took place as to the purchase of a machine; BROWN at first asked 550*l.*, but at length consented to take 500*l.*, delivered in a boat which defendant was to send for it.: 250*l.* was to be paid on delivery, and 250*l.* when the machine got to work. The first sum of 250*l.* was punctually paid, but when the second became due, and BROWN was in want of money, defendant set up a claim to work as many of the machines as he pleased; this, of course, plaintiff would not accede to, and was obliged to bring his action for the amount. Besides the 500*l.*, there was 24*l.* 10s. for patterns and other things; and 250*l.* and 50*l.* had been received on account, leaving the balance due 224*l.* 10s. Mr. JOHN BROWN, plaintiff's brother, remembered defendant bringing two specimens of iron, and on trying one heat in the machine, he broke it, and said, "You've made good of my bad; you need not try my best, for this is very good iron." He also bore witness to a subsequent interview between the parties, when defendant complained that the first cost of the machine was expensive, and plaintiff offered to make some allowance if he would work more machines, as he was his first customer. Defendant said he should work as many as he pleased. Plaintiff said that could not be; when defendant said, "If you don't allow me to work as many as I please, I'll damn the invention altogether, otherwise I can get it introduced all over Staffordshire, if I give it a good name." Other witnesses spoke to the ordering, delivery, and perfect working of the machine, and the plaintiff completely made out his case. Mr. KEATING, Q.C., declined to call any witnesses, but, in addressing the jury for the defendant, spoke highly of the station occupied by him and his father, which would release them from all suspicion of a desire to evade payment. He asserted that the machine had been deliberately tried, was found worthless, pulled down, and thrown aside as old iron; and that the plaintiff had dealt with the father, Mr. GEORGE JONES, but had made JOHN JONES plaintiff, to keep him out of the witness-box. The jury eventually found a verdict for plaintiff for the full amount claimed.

Original Correspondence.

THE EXPLOSION AT WASHINGTON COLLIERY, SUNDERLAND.

SIR,—An explosion took place at Washington Colliery on Monday night last, by which 34 men and boys were hurried out of time into eternity. It appears this pit is working what is termed double shift, and the workmen who have lost their lives had gone down on that day at about four o'clock P.M., and the shift would end at four o'clock A.M., being the night shift.

The management of the colliery is under Mr. Croudace, as head viewer, and the under agent is Mr. Bell. Mr. Croudace being from home, having left on Saturday morning for London, was necessarily absent when the misfortune occurred. He was, however, sent for by telegraph, and arrived on Tuesday evening or Wednesday morning. So soon as the occurrence became known Mr. Bell was sought for, who, on descending the pit, found that an explosion of no ordinary character had happened. With that promptitude which is characteristic of the miners, every available means was put in requisition to get at the sufferers; but from the destruction of the air-passages, and the necessity to put out the furnaces, a long period elapsed before any of the bodies were recovered.

The news spread far and wide, and early in the forenoon hundreds of people were present, and the viewers and workmen from the neighbouring collieries lent their aid with right good will.

According to report, the colliery has not for some time been well ventilated, and the workmen state that not a day passed but the gas was so abundant as to fire when the match was applied to blast the coal, and that the show of inflammable air on the candle was regularly large, and indicative of danger in the air, which was what is called "loaded," and so soft and warm that the candles melted away much more quickly than in other pits where the ventilation is good.

There are other reports of a serious nature which, if established before the coroner's jury, will most assuredly make this the most important case of its kind which has occurred in this district. The inquest which was formally held yesterday, that the interment of the sufferers might take place, stands adjourned until Wednesday next, when it is hoped a full investigation will take place. The Government Inspector will, in the interim, no doubt use his best endeavours to find out the cause of the dreadful event, which has consigned so many of our fellow-creatures to a premature grave.

Being present when a great number of the bodies were brought out of the pit, it was most shocking to witness the black and mangled corpses carried exposed as they were found in the pit quite naked, and without a covering of any kind. This called from the multitude shouts of "shame! shame!"—it being at all such occurences common to bring the sufferers to bank covered either with some new flannel or sheets. Upon inquiry it was ascertained that the under agent dared not incur the expense; and a general opinion prevailed that Mr. Croudace would not, had he been at home, have allowed such a thing.

Not wishing to occupy any unnecessary space at this time, seeing that the whole affair will, ere another week passes, be brought to public ordeal, I will conclude this notice by repeating that, as far as appearances go, a much more searching investigation will take place in this case than which has been done at any former one—indeed, the miners are looking up to the effect of the Government Inspector's efforts to prevent future explosions by his determination and searching inquiry in this. A. B.

Newcastle, Aug. 21.

THE SCOTCH PIG-IRON TRADE.

SIR,—Perceiving the statement by "One in the Trade," in your last Journal, I hand you the following, and leave your readers to judge which is the most correct. I need scarcely add that there is a difference of opinion as to the AVERAGE yield of all the furnaces; but if taken at 120 tons per week for the whole year, I am persuaded it is the very extreme of their produce:—

Say, 109 furnaces in blast from 1st Jan. to 31st July, 30½ weeks, at 120 tons per week, on an *average* ..... *Tons*	399,000	
Shipments during same period fully ..... *Tons*	300,000	
Estimated consumption during the same period	140,000—	440,000
Diminution in stock since 1st January, about		41,000

Price of Mixed Nos., good brands, 1st Jan., 45s. per ton—present price, 38s. per ton, cash.

Glasgow, Aug. 19. ANOTHER IN THE TRADE.

THE COPPER TRADE.

SIR,—Nothing probably could show the impolicy of not making any attempt in *Cornwall* during the last few years to improve the process of smelting Cornish copper ores than the fact which you announced in your last week's Journal, that the export of copper alone from South Australia in the year 1850 amounted to "2204 tons 10 cwts.;" for it is an increase from 0 in less than three years. Being long since well convinced of the enormous loss of valuable ingredients, particularly of silver and sulphur, which the Cornish ores sustain by the present mode of smelting, I have often urged the necessity of an early change in the process, ere the home miner was overtaken by the above anticipated competition from South Australia, conjoined with the greatly increasing produce of Chili and the United States. But I should now imagine that even the most sceptical can entertain no doubt of the ability of the colonist and the foreigner to smelt their own ores in successful competition with the home smelter by the old process; as it appears somewhat too plainly, by official documents, that the imports of copper ores and regulus on the one hand have diminished from 50,177 tons in 1848 to 45,861 tons in 1850, while on the other hand the imports of copper have risen from 1749 tons in 1848 to 5337 tons in 1850, of which only 220 tons had then come from South Australia.

And there can be as little doubt that this country would be receiving more copper from abroad in the next 12 months if the price of that metal were now and to continue at 87*l.* 10s. per ton, as it was in February last year, instead of being 83*l.*, as at present, than the entire consumption of the United Kingdom in the same time; which, after a careful examination, appears to be 8000 tons, when the price is about 83*l.* per ton, and, therefore, that quantity would imply an increase in the imports of copper of no less than 50 per cent. Now, as this country, with Chili and South Australia, smelt a great deal more copper than they can consume, they export largely, and meet in third markets, particularly India, where, as a consequence, copper is now uncommonly abundant and cheap; this, with the influx at home of foreign copper, has, notwithstanding an excellent demand for the metal, reduced the price in Cornwall, in the last quarter, of a ton (20 cwts.) of copper in the ore to 62*l.* 1s. 6d. Consequently there is too much reason to believe that although the ores of the Burra Burra may fetch 74*l.* 10s. 6d. per ton of copper in the ore, as they did at the sale at Swansea on the 12th inst., yet, so long as the silver and the sulphur of Cornish copper ores are not saved, it will be in vain to hope for the return of former, perhaps too soon of present prices for Cornish copper ores.—WM. BIRKMYRE: *Aug.* 20.

P.S.—The striking fact, that the sales of Cornish copper ores in 1805 fetched more money by 130,129*l.* than they did in 1848, accounts in a great measure for the extreme falling off in the increase of the population of Cornwall in the last ten years; but had there been manufactories in the county for saving the silver and sulphur of these ores, it is not too much to say that a great part of the emigration of the last ten years might have been prevented.—W. B.

GUTTA PERCHA CONDUCTORS FOR BLASTING.

SIR,—On Monday last a select party, including several eminent military and scientific persons, witnessed a series of experiments at the Gutta Percha Works, at the Regent's Canal, the object being to show what was termed a *new* appliance for the explosion of blasts—namely, the adaptation of electro-galvanism for firing the charges. The conductor was not by any means *new*. It was the usual gutta percha-coated wire; and if it be thought a novelty by some, our friends in the Wharf-road are a little behind in scientific information. Nevertheless, it must be confessed that this mode of firing has been very partially adopted; and it would be very desirable if mine proprietors would exert themselves to aid in promoting its general introduction. Some consider that there would be a great loss, on account of the more economic nature of the fuse. Now, that is a great mistake. The fuse in explosions, according to the present system, is totally lost; whereas a very small portion of the gutta percha conductor, as we may call it, would be destroyed. The tamping, as all practical miners know, never suffers when properly performed, the explosion acting upon it only so as to compress it. It would have the effect, therefore, of preserving the conductor, excepting a small portion of the terminal point in actual contact with the charge. What a multitude of accidents would not this system prevent? Frequently, from the recklessness of miners, most serious casualties occur, in consequence of attempts to save the charges when the fuses miss or hang fire. Miners, in the districts where the old straw fuse is used, are often caught when attempting to remedy the defect;

and I once saw a man, when the fuse seemed to burn too slowly, run up to blow it;—it was the greatest miracle that he escaped.

The experiments to which I now allude were sufficient to satisfy any one ignorant of the capabilities of galvanism as to its applicability for mining purposes, associated with conductors coated with gutta percha. A single wire suffices—the earth or water acting as a conductor—to complete the circuit. Several charges were fired on the barge to which the conductor, submerged in the canal, was suspended in coils to the extent of 70 miles. At first, the length of 57 miles was tried, and then augmented to the full complement. The negative and positive poles of the conductor were, of course, immersed in the water, the intervening aqueous element transmitting the current. Some charges also were placed under water, and efficiently exploded.

I address my suggestion that this method of firing should be adopted to the proprietors of mines, who are generally more considerate with respect to the sacrifice of life than the miners themselves. There is no doubt they will have to contend against the prejudice and perverseness of their subordinates and workmen. Innumerable groundless objections will be raised. The trouble of shifting batteries, the annoyance of the acids, the impossibility of training the men to a new principle, the temporary interruption of work for trying and practising, will all have a considerable, though unjustifiable, influence with captains of mines. Still I say that those temporary inconveniencies should not weigh against such an important improvement.

I have often, since the occurrence of the straw fuse I have above mentioned, thought of the necessity for introducing electricity as the means of igniting charges; but I confess that I felt convinced that the miners would kick against the use of the battery, which, to be thoroughly effective for large blasts, requiring a long conductor, must be of considerable power. Thus I should say the number of troughs, with (say) a dozen pairs of elements each (of the sizes generally used for the electric telegraph), employed on Monday last, could not have been far short of 20. It is true that you would never want one mile of wire much less 70; still it would be constantly necessary to operate with batteries of no trifling power. This consideration has led me to think that frictional electricity might be more advantageously applied to this purpose. A box $16 \times 14 \times 6 = 1344$ cubic inches, would contain a very powerful machine. Two discs, of bismuth and antimony, the extremes nearly of negative and positive metals, could be made to charge a Leyden battery of flat-shaped gutta percha jars, which might be discharged by a detente. This might be made so simple that the most unpractised miner could charge it, ascertaining by an indicator when that operation would be completed, and the discharge of the battery would be as simple as that of a gun. For short distances a machine, infinitely more portable, would suffice, and might be conveniently carried by every miner. If this suggestion instigates any person to construct such a machine, I shall be too happy to have contributed my mite towards such an useful object. If not anticipated, I shall myself make one, which may be subjected to examination—my past efforts in this direction being merely experimental, but sufficient to convince me of the feasibility and economy of the arrangement.—Rayo: *August* 20.

CALLOW'S NEW BLASTING POWDER.

Sir,—Much has been argued for and against the new arsenical blasting powder. Will you, therefore, be pleased to answer the following important query, as in all probability (from the respectable evidence of "A Pyrotechnist" "that the question of percussion and friction is much more serious") the lives and limbs of some of our valuable miners might be sacrificed in using the powder, unless the question is satisfactorily replied to. Supposing that Callow's powder in a cartridge should fit tight into a hole (the holes not being true, and the bottoms less than the tops, as is generally the case), the miner will, consequently, force the package or cartridge down, in which there will be both concussion and friction, in so doing will there be a tendency to an explosion? It would be well to have the decision of more than one or two persons on the good or bad qualities of this powder, as every thing tending to foul the workings, particularly in our hot and close ends, would be injurious to the miner.

Falmouth, Aug. 18. G. C.

PATENT CAST-IRON PAVEMENT.

Sir,—While I beg to thank you for the notice you have taken of my patent cast-iron pavement in last week's Journal, I am desirous to correct an impression which may arise from your remark, that you fear "it will be found quite inapplicable to the continuous concussive action of rattling carts, omnibuses, and carriages, to which street traffic is liable."

It is scarcely fair to pronounce decisively that it will be found *unable* to stand the rattling of carriages, &c., inasmuch as having already tested its powers of endurance for several months at our own works, I can speak confidently of its ability to bear the very heavy loads necessarily passing into and out of an extensive foundry, without a single plate having been either broken or displaced. The carts and waggons used are, moreover, of such a kind as to have given it a very fair trial, as far as rattling is concerned, in respect that the conveyances employed for the carriage of pig-iron, coals, and heavy castings, are either so loosely fitted on the axles, &c., or soon become so *shakey*, as to create rattling sufficient. Though I have no fear of the result, if properly laid down, I have to request you will suspend judgment for a short time, as I am about to lay it down, by permission of the municipal authorities, in one of the streets of Glasgow, where it will be sufficiently tested by carts, omnibuses, carriages, and the other various modes of weighty, rapid, and continuous concussion, to which a great city thoroughfare can be subjected, the result of which I will communicate to your Journal.—Thomas Allan: *Glasgow, August* 20.

THE PATENT LAWS.

Sir,—The fate of the Patent Law Bill is to be regretted, as postponing for a considerable period any improvement in an injudicious and oppressive law; but let the time now given for fresh action be occupied in endeavouring to render the proposed change more satisfactory. I agree with Lord Granville, though not for his reasons, that, in strict fairness, there ought to be no Patent Law whatever. The common sense and equitable law on the subject of inventions would resemble, as nearly as the case will admit, the law of copy-right in reference to works of literature. Every individual, on producing something new and valuable, should, at once and without cost, be entitled to the exclusive right over the multiplication of its copies and its sale to the public. Whether the thing produced be in the department of literature or in that of scientific invention—whether, in perfecting the production the author has occupied a day or 20 years—whether the completion of the work has cost nothing, or many thousands (the latter being often the case in matters of scientific invention)—the work, when accomplished, is equally, on the common-sense principle, the property of its author, and this without cost. No real distinction can fairly be made; and if injustice has hitherto been done to the scientific inventor, the change to be now made ought entirely to abolish the oppression, whatever unjust profits the public exchequer may be obliged to relinquish. To suppose for a moment that a nation having no copy-right for the press would be otherwise than poverty-stricken in its literary productions—and this, too, in spite of such a nation possessing a large body of men eminent for learning and talent—would be absurd; and not less absurd, or rather, perhaps, more so, would it be to imagine that a person would devote years of his life, and a considerable portion of his wealth, to the completion of a scientific invention—an invention of that description on which the greatness of England's powers so much depends—if, on perfecting his designs he loses all right over his achievement!

All that the interests of inventors, and the advantage of the public (who are so much benefitted by the discoveries), require is a system of registration of rights. When an invention has reached a certain stage, at which further proceedings could scarcely take place without risking the disclosure of the inventor's secret, then let him register his design (as he would have done under the late bill, but not, as there, at the cost of 5*l.*); and, after the lapse of a stated period, let him be required to proceed to full registration and specification, or forfeit his acquired right. A fee, adequate to the expense of these registrations, will be necessary, and also, eventually, another for gazetting the author's exclusive rights. There can be no reason why those who are endeavouring to obtain improvements in the Patent Law should not aim at making it altogether equitable. Shall it be supposed that a British Parliament, prompted by the mere sordid motive of putting a trifling sum into the Exchequer, is willing to perpetuate a law, equally oppressive to meritorious inventors and paralising to attempts at progressive improvement in social welfare.—K.: *Loughborough.*

P.S.—It would be fair to allow, without exception, the same privilege, and on the same conditions, to foreign nations which they give to us on this subject. Thus would be put in practice that much praised, but seldom found in use, theory of real reciprocity.

THE ELECTRIC LIGHT.

Sir,—For a considerable time during 1849 and 1850, the public mind was agitated by accounts of the discoveries of Messrs. Staite and Petrie, who occasionally exhibited splendid specimens of the electric light, and two or three other parties who had also taken out patents for this description of artificial illumination. Messrs. Staite, in particular, always professed that they could supply light as economical as gas; and at an exhibition at Crosby-hall, about two years since, I heard Mr. Staite affirm, in answer to a question put to him as to whether they had satisfied themselves as to the economy of the electric light, that he could produce it—light for light—at a cost not exceeding that of gas, or any other principle of illumination. My object in troubling you with these few lines is to inquire whether Mr. Staite is still in this country, and what obstacles are now in the way, since that of cost seems to have been surmounted, of carrying out effectually this beautiful result of electrical science?

Grosvenor-square, August 20. Cambo.

Mr. CRADDOCK'S IMPROVEMENTS IN STEAM-POWER.

Sir,—You will oblige me by giving insertion to the few following remarks, having reference to the letter of "Investigator," which appeared in the *Mining Journal* of August 2, and that of Mr. David Mushet, August 16. I thank "Investigator" and Mr. David Mushet for the frank spirit they display, and for the avowal of their desire that I and my inventions should receive justice and fair-play; and, on my part, I will assure them, and all who, like them, will investigate the matter in a fair and impartial manner, that from me they shall have every assistance in my power, as my object is, and ever has been, that the truth, wherever it be, should be made apparent to the public eye. "Investigator" has called attention to a subject of considerable importance in connection with progressive improvement, in alluding to that kind of knowledge which is derived from the facts forced upon the understanding of the practical man by the working of the steam-engine, as distinguished from that voluntary power possessed by the mind when correctly informed upon all the abstract principles by which it can extend its consideration of the subject, so as practically to realise the means by which other equally valuable facts are established. Now, here I think there can be little difference of opinion among those who will give themselves time to reflect upon the actual state of this question—as to who are, and who are not, possessed of the practical facts thus thrust upon the understanding. The actual state of the question is briefly this, that 11 years ago I had, as I then thought, good reasons for believing that by certain arrangements of mechanical parts the abstract principles involved in the steam-engine were capable of establishing facts of more valuable import to mankind than had then been accomplished. To such proposals of mine the then *practicals* saw insuperable difficulties, and, of course, I have had to labour not only against their indifference, but their then condemnation and continued opposition. However, the continual success which has attended all my mechanical or scientific labours, has placed beyond doubt the soundness of the abstract principles upon which I based my then intended improvements, whilst the 11 years of practical experience, and the multiplicity of experiments which I have made upon a large and practical scale, has completely changed the position of my opponents and myself, as now I know, by unmistakable evidence, resting upon practical fact, much of that which, if they knew at all, they must infer from a consideration of the abstract principles, as they have not had the practical experience which in their estimation is necessary to constitute the practical man. Public and manly opposition every one who has truth on his side should meet by the force of argument, and the demonstrations of experiment. Had such been the kind of opposition manifested towards me, I do not think my communications to the *Mining Journal* would have had that tinge of complaint which seems to have misled Mr. David Mushet, but through and beyond which I am glad to find he has now penetrated; and now that he has done so, I hope that he will, for the time being, lose sight both of me and my opponents, and direct his powerful and truly practical mind to the investigation of the commercial value the inventions possess. If they have none, he will establish the case of my opponents; if they have, he will confer a benefit upon mankind, and deserve the thanks in particular of many parties to whom steam-power is an item of vital importance; and *perhaps I may*, as the last in the list, reap some benefit. I will now only observe, in conclusion, that the experiments referred to at the London Works took place in the years 1843 and 1844, and not 1847, as stated in Mr. David Mushet's letter. What the inventions were then, and what they are now, I shall defer explaining in detail to a future opportunity; but in relation to Mr. David Mushet, I do hope he will favour me with a call, and I will then lay the whole before him, and give all explanation in my power, feeling assured that impartiality, directed by a sound understanding, will actuate and enable him to give to the public an unbiased and an enlightened opinion upon the whole matter.—T. Craddock: *Ranelagh Works, Pimlico, August* 23.

SUBSTITUTION OF CAST-IRON FOR WOODEN SLEEPERS.

BY R. W. KENNARD, ESQ.

One of the most important means of promoting the economic well-being of society is the establishment of an efficient system of road communication. The ancient masters of the world appreciated this, and carried out their views with their wonted sagacity and energy; and although stimulated by military rather than commercial motives, the Roman Viæ still remain the most curious and astounding monuments of that wonderful people. It may be affirmed, without qualification, that the most civilized nations are those in possession of the most perfect system of roads. Indeed, the action here is reciprocal. The wants of a progressing civilization quickly point out the necessity of a facile intercommunication on the one hand, and, on the other, the intersection of a country by well-constructed roads promotes the rapid spread and development of civilization. It is evident that without these all commercial exchanges and the diffusion of the produce of labour would be next to impossible, owing to the slowness, difficulty, and expensiveness of transport.

Innumerable facts could be adduced in support of this; we may, however, simply refer to the economical phenomena presented by the state of New York, during and after the construction of the Erie Canal.

The works of this celebrated canal, from Lake Erie to the River Hudson, were commenced in 1817. In eight years it was open for navigation in its entire length. In 1817 the productive property of the state represented a capital of six millions and a half; in 1837, twelve years only after the completion of the canal, the said representative capital amounted to 47 millions. The town of New York, which felt more particularly the beneficial effects of this canalization, exhibited a more remarkable evidence of prosperity. Ten years prior to the opening of the canal the private fortunes of that city were estimated at 300,000*l.*; ten years after the completion of the canal the said estimate had risen to 29 millions; and the vast country through which the canal passes, once covered with primitive forests, and inhabited by wild beasts and savage Indians, is now a richly cultivated land, dotted all over with flourishing and populous villages and cities.

Railways form a new feature in this all-important branch of industrial economy. Human skill has triumphed over the sluggishness of matter, and reduced distance itself to an almost insignificant element in our calculations. The isolation of nations is no longer possible. Geographical remoteness is now only measured by a brief space of time, so that Liverpool, Leeds, and Hull, may be regarded as the mere suburbs of London. And as the system of railroads is perfected and extended, the people of the earth will form one vast bee-hive, in perpetual ferment and intercommunication. The resistless power of combination will become more and more evident; the selfish exclusiveness of race will gradually but surely disappear, and the human family be firmly bound together by the bonds of peace, industry, mutual interest, and common hopes.

But the vital importance of this matter furnishes the very ground why we should not be satisfied with our actual position. Progress is now more than ever the law of humanity, and there exists no reason why human ingenuity should not improve upon the present as much as the present has already improved upon the past. It has become the interest of every member of the community that all the intellect, science, and practical knowledge of man should be brought to bear upon the whole machinery of railway transit. Every improvement in this, however trifling, will aid both the production and distribution of wealth, and, at the same time, diffuse the light of civilization, so that the subject is of equal interest to the political economist and to the missionary of social progress.

Two things are to be distinctly aimed at: 1st. The perfectionment of the machinery in its minutest details, from the locomotive to the rail, and the sleepers upon which that rail reposes.—2nd. Economy in every department of the construction and working of the system. Every improvement, even the slightest, upon these, confers a positive benefit, not only upon the pockets of shareholders, but upon society at large. For to regard the railway system as a mere pecuniary speculation is, as we have already hinted, to take far too low a view of the subject. It is not simply a question of pounds, shillings, and pence, but one of the happiness and advancement of the whole family of man.

The design of this paper is to offer a few remarks upon *one* branch of the system—viz., the sleepers upon which the real chairs are placed and supported. And the time is ripe for a careful reconsideration of this point. Timber was only regarded from the beginning as a *temporary* expedient. Very soon the actual arrangements must be revised. The old material is almost worn out, and must be replaced. The question consequently forces itself upon our attention, How shall this be done? Shall the old wooden substructure be continued or not?

This is a subject of vast magnitude, involving great outlay of capital. There are 7000 miles of railway in the United Kingdom—the cost of wooden sleepers average 700*l.* per mile—hence, to replace the actual system, when worn out (or as it wears out, which comes to the same thing), will cost 4,900,000*l.* the smallest per centage of economy upon which would have a strong claim upon our attention. Now, is there any known material better adapted for the support of the railway chairs than wood? We think there is; and we shall endeavour to prove it by appeal to facts and figures. There are many weighty objections to the use of wood, from which iron is wholly free. Iron is both more durable and economical in original cost and in maintenance. These assertions are not mere objections expressed dogmatically, but are sustained by numerous experiments, and confirmed by adequate experience; and these we shall at once present in some detail, and then close our observations by stating categorically the conclusions to which we have been led by our study of the subject.

In the present system of construction, the use of timber in the substructure is open to many serious objections. Indeed, the imperfection of wooden sleepers has long forced itself upon the consideration of all parties practically engaged in the maintenance of the permanent way of railways. The cost attendant upon the renewal of the decayed sleepers forms a very considerable and constant item of expenditure, of which we shall speak more fully hereafter. But another evil, involving consequences of still greater magnitude, arises from the instability and looseness of the numerous parts. This looseness causes blows to be given to the engine in passing over the rail, by which the traction is increased, a most uncomfortable jerking, fatiguing the passengers, and rapid destruction ensues to rails, chairs, and carriages.

Mr. W. H. Barlow, in his very able paper on the Construction of the Permanent Way of Railways, read before the Institution of Civil Engineers, May 14th, 1850, observes, pp. 5, 6, "If the progress of disarrangement of the ordinary road be watched, it will be found to commence at the joint-chair, which, with its sleeper, becomes inclined in the direction of the traffic, producing an irregularity or unevenness in the level of the rails. This causes a blow to be given by every wheel, which loosens the joint-key, and disturbs the sleepers in the ballast. This disturbance is at length communicated to the intermediate sleepers, inducing constant labour in re-adjustment, which is rendered greater by the number of small parts of which the road is composed." An important step will be made in the working of railways when this difficulty shall have been overcome. Any temporary measures will only tend to swell the ultimate expenditure. The desideratum is clearly pointed out by Mr. P. Barlow in his Report to the Directors of the South-Eastern Company, wherein he remarks that we must aim at "a construction by which the blow is entirely avoided, and by which the rail longitudinally is rendered as nearly as possible one continuous bar, and the chairs, rails, and sleepers, *composed of as few parts, and rendered as much as possible one mass, incapable of movement among themselves.*" The expressions we have underlined point out emphatically the remedy which *must* be sought to get rid of the manifest imperfections of the present system of wooden substructure. The looseness among the numerous parts of the present system is the radical evil to be cured: there must be a compact unity of structure, incapable of being shaken or disturbed in its own composition by the passage of the trains. The blocks at first used by engineers were rapidly hammered into holes by the chairs, *in consequence of the looseness of the parts*, and a quick destruction ensued, involving, of course, considerable expense. To obviate this, a soft material was used to strike against, *in order to diminish*, as was thought, the rigidity, and so reduce the force of the blows given by the engine; but, as Mr. P. Barlow justly observes, this was only laying down "a temporary road, instead of a permanent one:" it was patching up and not curing the disease. *[To be continued in next week's Journal.]*

[*Duty Free.*

TO BRASSFOUNDERS AND OTHERS.—Notice is hereby given, that the SOUTHAMPTON LOCAL BOARD OF HEALTH are ready to RECEIVE TENDERS for the SUPPLY of SLUICE and FIRE COCKS, in accordance with the drawings and specification; the former of which may be inspected, and the latter obtained upon payment of 5*s.*, at the office of the Clerk to the Local Board of Health of Southampton, on and after the 24th day of July instant.

Sealed tenders, endorsed "For Hydrants," and addressed "Clerk to the Local Board of Health, Southampton," must be sent in on or before the 5th day of September next.

By order of the Special Works Committee,
Southampton, July 17, 1851. CHARLES E. DEACON, Clerk.

BRISTOL AND EXETER RAILWAY.—Notice is hereby given, that the next HALF-YEARLY GENERAL MEETING of proprietors of this Company will be HELD, in pursuance of the Act of Parliament, at the White Lion Hotel, in the city of Bristol, on Thursday, the 28th of August, at Twelve o'clock.—The chair will be taken at One o'clock precisely. JAMES W. BULLER, Chairman.

The transfer-books will be closed on the 18th of August, and not re-opened until after the said half-yearly meeting on the 28th of August. J. B. BADHAM, Secretary.
Bristol Terminus, July 30, 1851.

GREAT WESTERN RAILWAY.—London Terminus, Paddington, August, 1851.—TENDER for the SUPPLY OF COKE, to be delivered at any of the Stations of the South Wales or Great Western Railways.

The Directors hereby give Notice, that they will be ready to RECEIVE TENDERS, on or before the 17th of September next, for the SUPPLY of the very best LOCOMOTIVE COKE, deliverable at any one of the above railways.

The contract to commence on the 1st day of January, 1852, and the total quantity required will be about 50,000 tons per annum.

The conditions of payment, and probable term of the contract, may be known by application, at this station, to the undersigned. CHAS. A. SAUNDERS, Secretary.

WESTERN RAILWAY OF FRANCE.
(PROVISIONALLY REGISTERED.)
SECTION FROM PARIS, THROUGH VERSAILLES, TO CHARTRES, LA LOUPPE, AND LE MANS.

Conceded to Messrs. Samuel Morton Peto, M.P., Charles Geach, M.P., Thomas Brassey, Edward Ladd Betts, Charles Fox, John Henderson, and Charles Samuel Stokes, by a Law of the National Assembly, and Gazetted in the *Moniteur* of 23d May, 1851.

Capital £1,320,000, in 44,000 Class A and 22,000 Class B shares, of £20 each,

To carry the line as far as Le Mans; with power, by the issue of further shares, to increase the capital to £2,200,000, when required to extend the line to Rennes—such new shares to be offered, *pro rata*, to the then holders of the original shares.

Shareholders to act as TRUSTEES for the ENGLISH ASSOCIATION:—
EDWARD CROPPER, Esq., Liverpool, director of the London & North-Western Railway
JOHN ELLIS, Esq., M.P., Leicester, Chairman of the Midland Railway
JOSEPH CHRISTOPHER EWART, Esq., Liverpool, director of the Peninsular and Oriental Steam-Packet Company
GEORGE GRENFELL GLYN, Esq., 67, Lombard-street, London
ROSS DONNELLY MANGLES, Esq., M.P., Guildford, director of the East India Company
WM. ROTHERAM, Esq., Liverpool, director of the London and North-Western Railway
WILLIAM SCHOLEFIELD, Esq., M.P., Birmingham
LEO SCHUSTER, Esq., Watling-street, London, Deputy-Chairman of the London and Brighton Railway
THOMAS SMITH, Esq., Gloucester-square, London, Deputy-Chairman of the London and North-Western Railway
JOSHUA PROCTER BROWN WESTHEAD, Esq., M.P., Manchester

BANKERS.
LONDON—Messrs. Glyn, Mills, and Co., 67, Lombard-street.
LIVERPOOL—The Borough Bank.
GLASGOW—The Union Bank of Scotland.
MANCHESTER—The Manchester and Salford Bank.
BIRMINGHAM—The Birmingham and Midland Bank.

ENGINEER—Robert Stephenson, Esq., M.P., London.
SOLICITORS—Messrs. Swift & Wagstaff, Liverpool, and Great George-street, Westminster.
SECRETARY (pro tem.)—James Edward Coleman, Esq.

OFFICES OF THE ASSOCIATION—44, MOORGATE-STREET, LONDON.

The leading features of the undertaking are these:—

A line opened and working for 46 miles, producing an immediate nett revenue of nearly £50,000 per annum.

At the expiration of one year, a double line of railway, 68 miles long (from Versailles to La Louppe), at an outlay to the concessionaires of £680,000.

In three years a railway to Le Mans, 123 miles long, at an outlay of £1,320,000, including a loan of £400,000 to the Government, to be repaid and employed in extending the line to Rennes.

The prospect of 106 additional miles of single line (to Rennes), at a cost of less than £4000 per mile.

Certainty as to the produce of the traffic on the unopened portions of the line, the traffic upon the portion already opened having exceeded the original estimates.

A concession by the French Government for 99 years, to date from the final completion to Rennes.

No competing railways or canals.

An engagement by eminent contractors to perform the works, &c., of the concessionaries' company within the estimates.

A guarantee by the French Government of 4 per cent. on the capital expended, for fifty years.

The appropriation of this guaranteed interest exclusively to the holders of class A shares, thus insuring to them an immediate interest of 6 per cent on their subscriptions.

Division of nett profits beyond, in the proportion of one-sixth to holders of class A shares, and five-sixths to holders of class B shares.

The full particulars of the Association are set forth in a prospectus, of which copies may be had on application to the secretary, at the office of the English Association, 44, Moorgate-street, London; and no application for shares will be received unless made upon, and in the form attached to, the prospectus.

J. E. COLEMAN, Secretary (pro tem.)

ASSAY OFFICE AND LABORATORY, 23, HAWLEY-ROAD, KENTISH TOWN—conducted by Mr. MITCHELL, F.C.S., author of "Manual of Practical Assaying," &c.—Mr. MITCHELL begs to inform the Mining and Manufacturing Public, and Bullion and Metal Brokers generally, that he continues to conduct ASSAYS and ANALYSES of MINERALS, METALS, SOILS, and FURNACE and all other MANUFACTURING PRODUCTS.—ADVICE to PATENTEES and MANUFACTURERS on all MATTERS involving a knowledge of Chemistry.

INSTRUCTION, as usual, in ASSAYING, ANALYSIS, and METALLURGICAL and MANUFACTURING CHEMISTRY.—23, Hawley-road, Kentish Town.

GOVERNMENT SCHOOL OF MINES,
AND OF SCIENCE APPLIED TO THE ARTS.

Museum of Practical Geology.

The COURSE of STUDY at this INSTITUTION will commence on THURSDAY, the 6th of November, 1851, and the following LECTURES and PRACTICAL DEMONSTRATIONS will be given during the session:—

1. CHEMISTRY, applied to Arts and Agriculture .... LYON PLAYFAIR, Ph. D., F.R.S.
2. NATURAL HISTORY, applied to Geology and the Arts } EDWARD FORBES, F.R.S.
3. MECHANICAL SCIENCE, with its applications to Mining } ROBT. HUNT, Keeper of Mining Records.
4. METALLURGY, with its special applications .... JOHN PERCY, M.D., F.R.S.
5. GEOLOGY, and its practical applications .... A. C. RAMSAY, F.R.S.
6. MINING and MINERALOGY .... WARINGTON W. SMYTH, M.A.

The fee for the course of two years is one payment of £40; or £20 for each session, from November to August inclusive.

Practical Instruction in the Field, in Geology, Mining, and Palæontology, is included in the above charges.

Occasional Students may attend separate Courses of Lectures and Field Instruction on payment of the Fees mentioned in the program.

The Laboratories for Chemistry and Metallurgy will be open for the reception of Pupils on payment of £15 for the session of five months.

Officers of the Army and Navy, either in the Queen's or the Honourable East India Company's service, are admitted to the Lectures at half the usual charges.

Students who propose to enter with the view of obtaining the Diploma of the Institution, are requested to apply to Mr. Trenham Reeks, at the Museum, from whom the necessary information may be obtained. H. T. DE LA BECHE, Director.

STEAM TO INDIA, CHINA, &c.—Particulars of the regular
MONTHLY MAIL STEAM CONVEYANCE,
AND OF THE ADDITIONAL LINES OF COMMUNICATION, NOW ESTABLISHED BY THE
PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 55

with the EAST, &c. &c. The Company book PASSENGERS, and receive GOODS and PARCELS, as heretofore, for CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG KONG, by their steamers, starting from SOUTHAMPTON on the 20th of every month, and from SUEZ on or about the 10th of the month.

One of the Company's first-class steamers will, however, be dispatched from Southampton for Alexandria, as an extra ship, on the 3d September and 3d November next, and of alternate months thereafter, in combination with extra steamers, to leave Calcutta on or about the 20th August and 20th October.—Passengers may be booked, and goods and parcels forwarded by these extra steamers to or from SOUTHAMPTON, ALEXANDRIA, ADEN, CEYLON, MADRAS, and CALCUTTA.

BOMBAY.—The Company will also dispatch from Bombay, about the 1st September next, and of every alternate month thereafter, a first-class steam-ship for ADEN, to meet there the extra ship between Calcutta and Suez; and at Alexandria one of the Company's steam-ships will receive the passengers, parcels, and goods, and convey them to Southampton, calling at Malta and Gibraltar.

But PASSENGERS, PARCELS, and GOODS for BOMBAY and WESTERN INDIA will be CONVEYED THROUGHOUT from SOUTHAMPTON in the Mail steamers, leaving Southampton on the 20th of October, and of alternate months thereafter, and the corresponding vessels from Suez to Aden, at which latter port a steam-ship of the Company will be in waiting to embark and convey them to Bombay.

Passengers for Bombay can also proceed by this Company's steamers of the 29th of the month to Malta, thence to Alexandria, by Her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA: On the 20th and 29th of every month.—CONSTANTINOPLE: On the 29th of the month.—ALEXANDRIA: On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th, 17th, and 27th of the month.

N.B.—Steam-ships of the Company now ply direct between Calcutta, Penang, Singapore, and Hong Kong, and between Hong Kong and Shanghae.

For further information and tariffs of the Company's recently revised and reduced rates of passage-money and freight, and for plans of the vessels, and to secure passages, &c., apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

TO MINE PROPRIETORS, WATER-WORK AND LAND-DRAINAGE COMPANIES, CONTRACTORS, MANUFACTURERS, AND OTHERS.

GREAT BRITAIN STEAM-SHIP.— 56

The PROPRIETORS of this SHIP desire TENDERS for the WHOLE (or for any definite section, that would not prejudice the entirety of the remainder) of her STEAM MACHINERY, as originally constructed, consisting of FOUR 88-inch CYLINDERS, of 6-feet stroke, with pistons and rods, air-pumps and condensers, connecting-rods and guides, and all the detail of nozzle and valve gearing, necessary to render each pair of cylinders complete in themselves, from the pistons to the crank-pins.

Apply to Mr. Croome, civil engineer, or Capt. Mathews, on board the vessel, Sanden Graving Dock; or Gibbs, Bright, & Co., Liverpool.

CHYPRASE CONSOLS TIN AND COPPER MINE,
situated in the parish of ST. ENODER, near TRURO, CORNWALL.

In 1024 shares, of £5 5s. each.—Deposit £1 7s. 6d. per share.—Conducted solely on the *COST-BOOK SYSTEM.* 57

The attention of mining speculators and others are particularly directed to this promising undertaking, which, from the progressive and forward state of the works, holds out every prospect of its soon becoming a good dividend-paying mine; and from its known richness it is well worthy the attention of speculators in mining property.

A few shares only are offered to the public, as more than three parts are already taken up; therefore, immediate application is absolutely necessary, to be made to the Committee of Management, through Mr. Thomas Lewis, No. 17, New Meeting-street, Birmingham, purser; A. Yeates, Esq., solicitor, 77, New Hall-street, Birmingham; or to Messrs. Boxall and Co., 7, George-yard, Lombard-street, City, London.

Prospectuses, reports, and every information, may be obtained upon application to either of the above-named parties; the Committee of Management have decided to allot shares to approved applicants until further notice.

The deposits may be paid into the bankers of the Company, the "National Provincial Bank of England," at Birmingham; or through their London and provincial houses.

By order of the committee,
Birmingham, August 8, 1851. THOMAS LEWIS, Purser.

WEST CALLINGTON MINING COMPANY,—
CALLINGTON, CORNWALL.

In 5000 shares.—Deposit 20s. per share.—On the Cost-book Principle.
OFFICES,—29, TAVISTOCK-STREET, COVENT-GARDEN. 58

COMMITTEE OF MANAGEMENT.
STEPHEN BROAD, Esq., Peckham, Surrey.
RICHARD W. DARE, Esq., Queen-street, City.
WELLINGTON GREGORY, Esq., Cheapside.

BANKERS—Commercial Bank of London, 6, Henrietta-street, Covent-garden.
CONSULTING ENGINEER—Arthur Dean, Esq., Tottenham.
SUPERINTENDENT AT THE MINE—Robert Sergeant, Esq.

This mine, formerly known as Wheal Elizabeth and Comblawn (contiguous to the Callington and Holmbush Mines, now consolidated), is held from the late Lord Ashburton, at 1-15th dues, and renewable. The works are in operation, and five silver-lead lodes have been clearly developed. A sum of £5000 has been expended in sinking the shaft, &c. The steam-engine, machinery, and buildings, are of the most substantial character, which, with the whole of the apparatus and implements required for the working of this mine, are now in readiness, and cost only £2700. It is proposed that £5000 shall be subscribed by shares of £1 each (4000 of which are already taken), which will leave in the hands of the company a clear capital of £2300 to be appropriated to the working of the mine; and it is confidently anticipated that this sum will be amply sufficient to bring the mine into a productive state, and render further calls unnecessary. The highly favourable report made in 1849 of this mine by Capt. William Dean, and that subsequently made by Mr. A. Dean, afford ample evidence of the success so confidently anticipated.

Prospectuses, with report of Mr. Arthur Dean, may be obtained at the office, No. 29, Tavistock-street, Covent-garden. PETER BROAD, Secretary.

WEST CAMBORNE MINING COMPANY.
Divided into 5000 shares.—Deposit 20s. per share.
CONDUCTED ON THE COST-BOOK PRINCIPLE. 59
LONDON OFFICES,—3, GEORGE-YARD, LOMBARD-STREET.

These mines are in the same stratum of ground, and stand parallel to, and east and west of, Wheal Grenville, Tolcarne, Condurrow, Wheal Harriet, West Frances, South Frances, West Basset, North Basset, South Basset, and numerous other valuable and productive mines. They are held under lease for twenty-one years, at 1-18th dues, being situate at Carnyannen (the property of Hendre Molesworth St. Aubyn, Esq.), in the western part of Camborne, in the county of Cornwall—the most metalliferous district in the world. The sett is traversed by many east and west lodes, which present on the backs the usual indications of the district—viz.: gossan, quartz, blende, iron pyrites, fine specimens of grey and oxide of copper ore, together with other metallic concomitants. Several slides and cross-courses intersect the lodes, of known importance; a fine elvan-course exists about the junction of the killas and granite, which takes place in the Company's grant.

From the ablest and most careful judgments of the oldest and best mining agents in Cornwall, £6000 is deemed amply sufficient to purchase and erect the necessary machinery, and bring the mines into profitable and good working order; therefore, it is proposed to sell 3000 shares, at £2 each, and the remaining 2000 shares to be retained by the proprietors for the transfer of the property, leases, and remuneration for work done.

The following few mines, situate in the same district, and within a short distance of the Company's grant, have paid, during the past half-year, £38,042 in dividends—the whole expenditure to realise which was £30,022, and the present market value of the same is £645,840. Thus it will be seen that the average return is £95 per cent. per annum upon the original cost, and upwards of £11 15s. per cent. per annum upon the current market value of shares. The aggregate amount of profits from these mines, divided, exceed £675,000—thus returning to the fortunate shareholders more than eight times their outlay, and the prospects of continued success at present being equal to any period of their existance.

	Outlay.	*Div. last 6 months.*	*Market Value.*
Wheal Buller	£ 1,280	£8320	£134,400
Carn Brea	15,000	7000	105,000
South Wheal Frances	19,840	5954	64,480
South Wheal Basset	2,620	5120	102,400
North Pool	4,500	4500	50,000
Wheal Seton	21,186	1980	49,500
South Tolgus	4,096	1920	46,960
North Roskear	10,000	1750	21,000
North Wheal Basset	1,500	1500	78,000
Total	£80,022	£38,042	£645,840

The expenditure, price, and profits divided, as far as can be gathered, are stated above. Many other mines in the neighbourhood, not valued, are selling at considerable premiums, and fast approaching dividends; but as the market price partakes more of a speculative than intrinsic value, and subject to constant changes, they are omitted.

Applications for shares to be made to the secretary, Mr. H. B. Bousfield, at the Offices of the Company; and to Messrs. Tredinnick and Co., 3, George-yard, Lombard-street, London, of whom prospectuses and all farther particulars can be obtained.

SHARP TOR COPPER MINING ASSOCIATION.—
In 6144 shares of £2 each.—On the Cost-book System.

COMMITTEE OF MANAGEMENT.
Mr. Alderman COPELAND, M.P., 160, New Bond-street.
JOSEPH THOMPSON, Esq., Gloucester-terrace, Hyde-park (director of the Commercial Bank, London).
JOSEPH TURNLEY, Esq., 19, Bedford-place, Russell-square.
JOHN VINK, Esq., 4, Crescent, Minories.
(With power to add to their number.) 60

BANKERS—The London Joint Stock Bank.
SECRETARY—J. A. Joseph, Esq.
OFFICES—No. 3, SIZE-LANE, BUCKLERSBURY, LONDON.

This MINE is situated in the parish of LINKINHORNE, in the county of CORNWALL. It occurs at the junction of the granite and killas, a stratification that has produced immense deposits of ores, and one in which are to be found by far the greater number of the dividend-paying mines in Cornwall.

The sett extends 300 fms. on the course of the lodes, and is held at 1-15th dues. It is bounded by the famed Caradon district, the mines of which are paying immense profits, and immediately adjoins the Phœnix Mine, being traversed by the cross-courses which made the ore there. The Phœnix Mine is also paying very large profits, and the shares are £240 each (the 200th).

In 1849, upon the recommendation of the manager of the Devon Great Consols, a lease was applied for and obtained by a small party of adventurers, who erected counting, manager's, and storehouses, smith's shop, &c., opened on a lode of immense size, from 20 to 30 feet wide, sunk a permanent shaft, and erected a 16-inch cylinder steam-engine, with engine-house, drawing and plunger lifts, and pitwork complete. This shaft is now 38 fathoms in depth, the lode in the bottom still maintaining its original size and highly-promising appearance.

This company, having abstained from placing it before the public, until by a sufficient trial, and the erection of an adequate plant, they had assured themselves that it was worthy of vigorous prosecution, is now formed for the purpose of securing the co-operation of parties who may wish to join the adventure; 3072 of the shares will forthwith be allotted on application, to persons of undoubted respectability only, at £2 per share; £3000 will be appropriated for future working capital, which is deemed amply sufficient to place the mine in a dividend-paying state, and the remainder to repay the outlay hitherto expended. The principle of the cost-book will be strictly maintained, no debt will be allowed to accrue, consequently there will be no liability.

The reports of eminent mining agents, prospectuses free of postage, and any further information can be obtained at the office of the company, where the Cost-book regulations can also be seen.

Applications for shares to be made to the secretary, or to Messrs. J. Hutchinson and Son, stock and share brokers, Lothbury; Messrs. Highfield & Withers, Liverpool; Messrs. Johnson, Bradley, and Walker, Manchester; Messrs. Flint, Hull; Messrs. Lane and Perry, Birmingham; and Messrs. Dickenson, Newcastle-on-Tyne.

Subjoined are the reports of eminent mining agents:—

Extract from Capt. J. Richards's (principal agent of the Devon Great Consols) report:—"The lode is of a most promising character, containing capel, spar, prian, and mundic, with here and there spots of good quality ore. The back of the lode, which has been opened upon by costean pits at the surface for a considerable distance, is of immense size, carrying on the south wall a very fine gossan, 10 feet wide; the north portion is harder, being a mixture of very fine capel and gossan. The cross-courses traversing the sett are the same which pass through Wheal Phœnix. The sinking of the shaft should be continued with as much force as can be brought to bear on it; and looking at the fact that the nature of the lode, as well as the country adjoining, is precisely similar to that of the Phœnix Mine (which I also inspected for the purpose of informing myself as to the character of this district), I have every reason to believe at increased depth this concern will become equally productive with its valuable neighbour."

Extracts from the original reports of Mr. J. H. Hitchins, consulting engineer to the Devon Great Consols Mine:—"I am quite as sure about it as I was in my representations and promises as regarding the turning up of Wheal Maria—in fact, I am going on the same ground of analogy. In both instances there are the same circumstances and conditions geologically observable—strictly so. The strongest inducement probably that I can well set forth would be to say, that the splendid gossan I have my eyes on is showing, in same way as in the case of Wheal Maria, at surface, of many tons weight. Upon the best corroborative evidence also, regarding relative position and run, added to rigid similarity of gossan, iron, quartz, &c., it is to be safely taken as being one and the same lode. There is also the essential fact of sufficient approximativeness, as between granite and schistose formations. There will be required for it comparatively but little of capital and time, important desiderata in mining you will undoubtedly admit. I am quite sure that it is our Maria lode—there is no other in the country with such an extraordinary up-heave of magnificent gossan; besides, its lineal course through the country—both on actual view and reference to the best geological map that we have—will prove it. "I am now writing here at Wheal Maria, surrounded by our agents, who have been looking at the stuff alluded to, and they are completely surprised at its magnificent character. I have had some of it tested, and it has been found to contain, in minute proportion, tin ore, which is the case in most of the great mining concerns in the country. The lode opposite the shaft is full 30 feet wide altogether, and the splendid gossan part 20 feet, which in depth will be the orey part, as practically realised, not only in the Devon Great Consols, but also in similar great deposits. There are rocks of most magnificent gossan at the surface, from the parts opened, full 4, 5, 6, and 7 cwts. each.

ST. AGNES BEACON TIN AND COPPER MINE,
CORNWALL.—In 2500 shares, of £1 1s. each.
(ON THE COST-BOOK SYSTEM—No further Liability). 61

In conformity to the Law of the Stannaries.—Committee to be selected from the shareholders. BANKERS—London and Westminster Bank.

The share list being nearly complete, early applications for the remainder part may be made to F. W. Pike, Esq., 26, Bedford-row; or Mr. John Morgan, sworn broker, No. 2, Copthall-court, London,—where plans and reports may be inspected.

Dated August 15, 1851.

BRAICH GOCH SLATE AND SLAB QUARRY COMPANY,
MERIONETHSHIRE, NORTH WALES.

Capital £14,000, in 3500 shares, at £4 per share.
TO BE CONDUCTED ON THE COST-BOOK SYSTEM. 62

MANAGERS.
THOMAS WAKEMAN, Esq., of Chalfont St. Giles, Bucks.
ROBERT JACKMAN, Esq., Half-street, Gloucester.
ARTHUR CAUSTON, Esq., civil engineer, Barton-street, Gloucester.
WILLIAM REES, Esq., architect, Clarence-street, Gloucester.
WILLIAM WINGATE, Esq., builder, Clarence-street, Gloucester.

BANKERS.
LONDON—Messrs. Spooner, Attwood, and Co., No. 27, Gracechurch-street.
GLOUCESTER—National Provincial Bank of England.
INSPECTING ENGINEER—St. Pierre Foley, Esq., civil and mining engineer.
AGENT AT QUARRIES—Mr. Thomas Smith Nicholls.
SECRETARY—Mr. John Fish.

This company is formed for the purpose of extenting the operations of the quarries known under the name of the Braich Goch Slate and Slab Quarries, forming part of the far-famed bands of the Aber Corris slate and slab district, east of Cader Idris mountain range, in the parish of Tal-y-Llyn, county of Merioneth, in the principality of Wales, comprising 111 A., 2 R., 18 P., and 7 miles from the shipping port of Aberdovey, to which the main road runs. A line of railway is in projection from the quarries to the above-named shipping port. This property is held on lease for 50 years, 43 of which are unexpired, at a present rental of £60 per annum, increasing £10 every seven years, or 1-10th royalty.

The character of the slate is of the very best description, and of that fine blue colour so much in demand by architects and builders, and peculiarly adapted for enamelling, and every description of ornamental work.

These quarries have been in the possession of the present proprietors several years, during which time they have expended upwards of £3000 in driving levels, opening quarries, and forming slate floors at different altitudes; erecting engine-house, water-wheels, and machinery; building offices, and other useful and necessary works.

The present proprietors have thus at their own cost thoroughly tested and developed the capabilities of these quarries, and being desirous to extend the works by erecting more extensive machinery, and opening the quarries on a scale commensurate with their capabilities, have resolved to augment the capital to be employed in these operations, and purpose to divide the quarries into 3500 shares, at £4 per share, making a capital of £14,000.

The proprietors, in order to show their confidence in the value of the property, propose to accept for their interest therein £5800, for which they agree to take £4800 in shares, and £1000 in cash; thus leaving 2300 shares to be disposed of. This will provide, after payment of the £1000, a working capital of £8200, available exclusively for the more extended operations suggested:—That the first deposit of £1 10s. per share be paid on allotment. All remaining calls not to exceed 10s. per share, of which 14 days' notice will be given, agreeable to the rules of the company. The proprietors feel confident that the full amount of £4 per share will never be required; they, therefore, propose that when the quarries are in a returning state, and paying dividends, and consequently no further calls required, the balance remaining shall be called in and invested in Government securities, to form the reserve fund; the interest thereon to be for the benefit of the shareholders.

The unlimited demand for slates and slabs renders the sales at all times a matter of certainty. It is a well known fact that no description of investment yields a more ample return than good slate quarries. These are deemed equal to any slate quarries now in operation—similar to those in North Wales, now paying from £30,000 to £100,000 per annum respectively. The lucrative character of the investment may, therefore, be relied upon with certainty.

The chief outlay and risk in slate quarrying are attendant on the opening of the rock and proving the quality of the slate; in this case these quarries have been fully proved, and only require to be extensively opened.

The proprietors, in submitting this undertaking to the public, particularly wish it to be understood that this must not be classified with a speculative adventure; it being both a solid and *bonâ fide* channel of investment.

Every information given at the offices of the company, Cushion-court, Old Broad-street; at Mr. J. Lane's, mining broker, 52, Threadneedle-street; at Messrs. Brooks and Co., 209, Piccadilly; and of Arthur Causton, Esq., 5, Barton-street, Gloucester; where samples of slate and slabs may be seen, and prospectuses and forms of application for shares obtained until the 30th inst., when the allotment will be made.

London, Cushion-Court, Old Broad-street, Aug. 7, 1851. JOHN FISH, Sec.

BRAICH GOCH SLATE AND SLAB QUARRY COMPANY.
NOTICE.—NO APPLICATIONS for SHARES in these QUARRIES will be attended to after SATURDAY next, the 30th inst. JOHN FISH, Secretary.
4, Cushion-court, Old Broad-street, August 23, 1851. 63

BRAICH GOCH SLATE AND SLAB QUARRIES.

Actual Return of Slates made during the months of May, June, and July respectively, as furnished by the manager:—

	Duchesses. 24×12.	Countesses. 20×10.	Small ditto. 18×9.	Ladies. 16×10.	Small ditto. 16×8.	Mos.
May	4100	3350	1850	400	1450	4600
June	4550	3200	1700	350	2800	4000
July	6700	4250	2150	500	2350	5200
Total	15,350	10,700	5700	1250	6600	13,800

Or gross total of 53,400—amounting to 115 tons.

This independently of slabs, of which there is an immense quantity quarried, and laying round the engine-house. The stock on hand is estimated at from £300 to £400.

August 21, 1851. JOHN FISH, Secretary.

LEE MOOR PORCELAIN CLAY COMPANY.
(PROVISIONALLY REGISTERED).—With limited liability.

Capital £100,000, in 4000 shares, of £25 each.
Calls £2 10s. each (with an interval of two months between each call). 64
DIRECTORS.
The Right Honourable the EARL OF MORLEY, Chairman.
THOMAS HAWES, Esq., London, Deputy-Chairman.
Sir WILLIAM SNOW HARRIS, Knt., Plymouth.
THOMAS H. BULTEEL, Esq., Plymouth.
CHRISTOPHER HARRIS, Esq., Plymouth.
JAMES RHODES, Esq., London.

SECRETARY—Mr. Sidney Smith.
SOLICITORS—Messrs. Amory, Travers, and Smith, 25, Throgmorton-street, London.
BANKERS—The London and County Bank.
OFFICES,—No. 30, BUCKLERSBURY, LONDON.

Prospectuses may be had at the offices of the Company, or of the solicitors.

GREAT WHEAL DIAMOND MINING COMPANY.
UPON THE COST-BOOK PRINCIPLE.

Under the protection of the Stannaries of Cornwall, which prevents any individual responsibility.—In 10,000 shares, of £1 each. Deposit 10s. per share. 65

This, it is expected, will be amply sufficient for the working of the mine. No further call can be made without the sanction of the shareholders.

This extensive and valuable mining property (held rent-free for 21 years, at a royalty of 1-15th) is adjacent to, and contains the same veins of copper as the celebrated Devon Great Consolidated Mines, which, with a paid-up capital of £1 per share, are paying dividends to the shareholders equal to an interest of 4000 per cent. per annum on the money invested.

For prospectuses, with details, apply to the secretary, W. H. Smith, Esq., at the offices of the Company, 4, King-street, Cheapside, London, to whom all applications for shares must be sent in not later than Wednesday, the 3d of September.

GREAT PEAT WORKING COMPANY OF IRELAND.
—The Directors have the satisfaction to announce, that they are now in a position to CONTRACT for the SUPPLY of COMPRESSED PEAT, or PEAT COAL. This newly-invented fuel has been proved to possess qualities eminently superior to any hitherto used, in all cases where steadiness of combustion, combined with intense calorific power, are required. Its freedom from smoke, and the total absence of clinker, render it especially valuable for locomotive and all other boilers, as well as for smelting and manufacturing purposes in general. 66

The attention of the colonial sugar interest is specially called to the fact of the Peat Coal being an efficient substitute for brush and cane trash, as it gives in combustion a long tongue of fervid flame, unattainable by any other fuel, either normal or artificial.

For domestic use it is quite equal to charcoal, without its pernicious qualities; and for exportation to tropical climates in general, its value will be rendered apparent from the fact of its not being subject to spontaneous combustion, nor alteration or falling, as in the case of coals, from alternations of heat and moisture. Being made in small flat blocks of equal density with coal, it presents a great advantage to shippers, as it occupies one-third less space in stowage than ordinary steam coal.

The works of the Company are proceeding actively, and it is expected that in less than three months they will be ready to contract for the supply of 600 tons weekly, which amount will be rapidly augmented as the Company's stations are completed.

By order of the board, HENRY OWEN, Secretary.
1, Agar-street, Strand, August 16, 1851.

TO THE MINING AND SHIPPING INTERESTS.

WIRE AND HEMP ROPES,—MANUFACTURED under
PATENT GRANTED TO JAMES B. WILSON, 67
HAYDOCK ROPE-WORKS, NEAR WARRINGTON.

Applicable to SHIPPING, INCLINED PLANES, MINES, COLLIERIES, &c.; as also to WIRE CABLES for SUBMARINE, OVERLAND, and UNDERLAND TELEGRAPHS.

Sizes, with comparative weights and strength, as also price per cwt. or fathom, may be obtained on application to the patentee.

All sizes of wire strands, railway signal lines, flat and round copper rope, lightning conductors, window sash lines, &c.—Warrington, July 5, 1851.

PURE PATENT WHITE ZINC PAINT, FROM THE
VIEILLE MONTAGNE ZINC MINING COMPANY.—This Company having become proprietors of all rights and patents of the late Patent White Zinc Company, in France and Belgium, is prepared to furnish, on a large scale, the WHITE OXIDE OF ZINC, in a pure state, and of a quality which can only be manufactured with the zinc from the mines in Belgium. PATENT WHITE ZINC PAINT is superior, in every respect, to White Lead Paint. It is entirely free from all poisonous influences, and is unaffected by sea water, sulphuretted hydrogen, or any gases; besides, it preserves its original colour, which White Lead Paint does not. WHITE ZINC PAINT causes none of those ravages invariably engendered by White Lead upon the human frame; neither painters' cholic or paralysis, &c., &c., to which dangerous complaints the workmen who manufacture and use it are liable, and to which persons who inhabit newly-painted apartments are also liable. A spurious article having been introduced in the market, under the name of White Zinc Paint, the public is cautioned against it, because, when adulterated, it becomes a very inferior paint, instead of a first-rate one. 68

For further particulars and prospectuses, apply to Mr. H. F. SCHMOLL, General Agent for England and Scotland, at the Company's Offices, 12, Manchester-buildings, Westminster-bridge; and for supply of materials and prices, at Messrs. CHARLES DEVAUX and CO., 62, King William-street, City.

PHILLIPS'S PATENT FIRE ANNIHILATOR COMPANY
—Notice is hereby given, that NO FURTHER APPLICATION for SHARES in this Company will be RECEIVED after TUESDAY, the 2d day of September next.

By order of the board, J. E. B. CURTIS, Secretary.
Office and Depôt of the Fire Annihilator Company, 105, Leadenhall-street, City. 69

ED. J. DENT has REMOVED from 82 to 61, STRAND
(being 21 doors nearer to Charing-cross, and directly opposite Bedford-street), and solicits an INSPECTION of his extensive STOCK of CHRONOMETERS, WATCHES, and CLOCKS, as above; also at No. 33, COCKSPUR-STREET, and No. 34, ROYAL EXCHANGE (Clock Tower area). 70

GAS LIGHTS FOR EXHIBITION.—
GUISE'S ORIGINAL ECONOMIC SHADOWLESS GAS BURNERS AND GLASS REFLECTORS are now well known to be the BEST BURNERS and REFLECTORS in the MARKET.—GUISE'S newly-invented GLASS-CONED SHADOWLESS GAS BURNERS have been tested by the first Gas Engineers of the day, and proved by them to be SUPERIOR in BRILLIANCY and ECONOMY to all burners hitherto invented. They are used with the short common straight chimney, and are extensively adopted by the London Gas Companies, and may be had of all respectable gass-fitters, and at Guise's Gas Burner Manufactory, No. 45, Clerkenwell-green, London. 71
*** None are genuine unless marked "Guise, Registered," or "Patent."

FOR THE SHOOTING SEASON, 1851.—
DEANE, ADAMS, & DEANE, GUN-MAKERS to H.R.H. PRINCE ALBERT, beg respectfully to call the attention of SPORTSMEN to their late IMPROVEMENTS in GUNS, PISTOLS, and RIFLES, which may be seen and tested daily, with a large assortment of their best town-made GUNS, at the MANUFACTORY, No. 30, KING WILLIAM-STREET, LONDON-BRIDGE.—August 7, 1851.
*** Sporting ammunition of the best quality on the lowest terms. 72

CLERICAL, MEDICAL, AND GENERAL LIFE
ASSURANCE SOCIETY.

Notice is hereby given, that the usual DIVIDEND of FIVE PER CENT. (less income tax) on the paid-up capital on the shares of the Society will be PAYABLE at this office, on and after Wednesday, the 20th day of August inst. 73

ACT OF PARLIAMENT.—In consequence of the powers conferred by an Act obtained in the session of 1850, the provisions of which came into operation on the 1st of July, 1851, ADVANTAGES and PRIVILEGES will accrue to all PERSONS NOW ASSURING to an extent greater than can be derived from most other offices. The particulars are set forth in a report and a new prospectus, to be procured (free of expense) by addressing a line to GEORGE H. PINCKARD, Resident Secretary.
99, Great Russell-street, Bloomsbury, London.

SEWERAGE OF LONDON.—The ATTENTION of the
COMMISSIONERS appointed to determine upon the MOST EFFICIENT MATERIAL for the CONSTRUCTION of the SEWERS OF LONDON, is particularly directed to the ASPHALTE OF SEYSSEL, which more than any other material is applicable to the CONSTRUCTING and INTERNAL COATING of BRICK CULVERTS, and OTHER CHANNELS for DRAINAGE. 74

The experiments made by the Royal Artillery on the embrasures of Plymouth Citadel, constructed of Seyssel Asphalte Brickwork, under the orders of the Hon. Board of Ordnance, have fully proved the superiority, adhesiveness, and strength of Seyssel Asphalte over all other cementitious compositions. A printed account of these experiments can be had on application to J. FARRELL, Secretary,
Seyssel Asphalte Company—"Claridge's Patent"—Established 1838.

Note.—The application of the Asphalte of Seyssel is specially recommended by the Commissioners on the Fine Arts for covering the ground line of brickwork in marshy situations, and it has been suggested that it would be peculiarly applicable for covering the *areas* of closed *grave yards*, and for the construction of *catacombs*.

BY HER MAJESTY'S ROYAL LETTERS PATENT.

THE PROCESS OF ICE BEING MADE IN ONE MINUTE,
without the aid of Ice, has elicited from Her Majesty, at the Grand Exhibition, her most gracious approval and unbounded astonishment, by 75
MASTERS & CO.'S PATENT FREEZING MACHINES,
which are now brought to the highest state of perfection; as also are the various MACHINES enumerated below:—

MASTERS'S PATENT FREEZING MACHINE, for making Dessert Ice and Rock Ice from Spring Water, and for Cooling Wine, &c., at a trifling cost.
BUTTER COOLER and FREEZER. ICE PERCOLATING FUNNEL.
ENAMELLED WINE REFRIGERATOR, for Icing Champagne, &c.
MASTERS'S PATENT SHERRY COBBLER FREEZING and COOLING JUG, for producing pure Ice from Spring Water in five minutes, at the cost of 2d., in the hottest climate.—Price 30s. and upwards.
COOLING DECANTER, or CLALET JUG.—COOLING and FREEZING FILTERER.
COOLING CUP, for Surgical purposes, &c. &c. &c.

The PUBLIC is respectfully INVITED to SEE the PROCESS of MAKING ICE, by the above machines, without the aid of Ice—the same process as exhibited by Mr. Masters to Her Majesty, at his Refreshment Rooms, at the Crystal Palace, where 100 quarts of Desert Ice, and large cylinders of Rock Ice are made daily—at Messrs. MASTERS & CO.'S principal DEPOT, 309, REGENT-STREET, adjoining the Polytechnic Institution, London.

MASTERS & CO.'S PATENT SODA WATER and ÆRATING APPARATUS, for charging Water, Wine, Ale, and other Liquids, with pure Carbonic Acid Gas. By this apparatus the purest Soda Water may be obtained at the cost of less than one farthing per glass; and so delicate is the operation, that it may be used in the dining-room. By the addition of the Jargonelle Pear Syrup, manufactured by Messrs. Masters & Co., the most delicious effervescing beverage is produced. Price 30s., and upwards.

N.B.—Syrups from all Fruits, for flavouring Soda Water, making Lemonade, Ices, &c.

Also, MASTERS & CO.'S PATENT ROTARY KNIFE-CLEANING MACHINE, manufactured in six different sizes, to clean and brilliantly polish Six to Twelve Knives in One Minute. Warranted to last many years, and not get out of order.—Price 35s. to 6l. 6s.

MASTERS & CO., PATENTEES, No. 309, REGENT-STREET,
Adjoining the Polytechnic Institution, London.

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price.
5120	Alfred Consols (copper), Phillack	3	£1 13 to 1st Aug.	£0 6 0 Aug.	14 13½	13 13½ 14
1248	Allt-y-Crib (silver-lead), Talybont, Wales	5	0 2 6 to August	0 2 6 ,,	7½ 8	
1024	Balleswidden (tin), St. Just	11½	8 11 to June	0 5 to June	10	
4000	Bedford United (copper), Tavistock Devon	2½	2 12 to June	0 4 to June	7¾ 7½	7¼ 7¾
64	Boscaswell Downs (tin), St. Just	—	750 0 to May, 1849	—	100	
100	Botallack (tin and copper), St. Just	182½	440 0 to 5th April	5 0 to May	200 205	200
1000	Bryntall, Llanidloes, Montgomeryshire	2½	0 5 to end June	0 5 to June	16 17	
1000	Callington (lead and copper), Callington, Devon	29	6 0 to Sept., 1847	—	6¼ 6¾	
1000	Carn Brea (copper and tin), Illogan	15	202 0 to June, 1851	2 0 to June	105	
1024	Chyprase, St. Enoder (tin and copper), Cornwall	3½	2 6 8 —	—	6½	
128	Comford (copper), Gwennap, Cornwall	65	— —	—	36½	36½ 40
256	Condurrow (copper and tin), Camborne, Cornwall	20	11 0 —	—	105 107½	100
1024	Devon Great Consols (copper), Tavistock	1	239 10 to Aug.	7 0 to Aug.	300 295	296 300
180	Dolcoath (copper and tin), Camborne	252	855 14 to 1847	—	28	28
128	East Pool (tin and copper), Pool, Illogan, Cornwall	24½	233 0 to 1843	—	165	140
94	East Wheal Crofty (copper), Illogan, Cornwall	125	242 10 —	—	130	120
128	East Wheal Rose (silver-lead), Newlyn	50	2215 0 to 25th July	15 0 to July	550	450 500
494	Fowey Consols (copper), Tywardreath	40	— —	—	30	
3750	General Mining Company for Ireland (copper)	1½	35 per cent. to June	10 per ct. ½ year	5½	
100	Goginan (lead), Cardiganshire, Wales	5	440 0 ,,	—	200	
96	Great Consols (copper), Gwennap, Cornwall	1000	353 6 8 to January	—	200	
119	Great Work (tin), Germoe	100	110 0 to June	7 10 to June	200	
1024	Herodsfoot (lead), near Liskeard, Cornwall	8	— —	0 5 ,,	6¼ 7	
1000	Holmbush (lead and copper), Callington	24	25 0 to Feb., 1844	Feb., 1844	12½ 13	
1000	Lewis (tin and copper), St. Erth	17	2 0 to 1st Aug.	0 10 to Aug.	18	20
160	Levant (copper and tin), St. Just	2½	1030 0 to 5th June	5 0 to June	150 155	
100	Lisburne (lead), Cardiganshire, Wales	75	640 0 to 1st Aug.	20 0 to Aug. 1	700	
5000	Low's Patent Copper Smelting Company	9	1 0 6 to July	0 4 6 to July 1	10	
20000	Mining Company of Ireland (copper, lead, and coal)	7	7 10 6 to Feb., 1847	7 p. ct. p. annum	4½	
200	North Pool (copper and tin), Pool	22½	210 0 to 1st Aug.	7 10 to Aug.	205 208	200 205 212½
140	North Roskear (copper), Camborne	10	220 0 to ditto	7 0 to Aug.	160	
6000	North Wheal Basset (copper and tin)	½	1 1 to 5th April	—	15	11 14
128	Par Consols (copper), St. Blazey	55⅝	374 0 —	—	650	
1160	Perran St. George (copper and tin)	21½	1 15 to June	0 10 to 4th June	40	
560	Providence Mines (tin), Uny Lelant	20½	18 4 6 to Aug.	0 15 to Aug.	25	
256	South Caradon (copper), St. Cleer	2½	255 0 to July	2 10 to July	122½	
256	South Tolgus (copper), Redruth, Cornwall	16	24 0 to 5th June	2 10 to June	150 ex div.	145 150 x.d.
248	South Wheal Frances (copper), Illogan	80	95 15 to 10th July	6 0 0 to July	230	
1024	Spearne Consols (tin), St. Just, Cornwall	1½	3 7 6 to June	0 12 6 to June	8¾ 9	
94	St. Ives Consols (tin), St. Ive's	80	851 0 to February	5 0 to May	80	
1000	Stray Park and Camborne Vean (copper), Cornwall	15	11 10 —	—	15	13 15
9600	Tamar Consols (silver-lead), Beeralston	4	2 11 to July, 1849	—	4 4½	
6000	Tincroft (copper and tin), near Pool	7	5 17 6 to Sept.	—	7	6½ 7
256	Trehane (silver-lead), Menheniot	1½	26 15 to August	1 0 to Aug.	15½ 16	15 15½
5000	Treleigh Consols (copper), Redruth	6	1 3 to Oct., 1847	0 5 Oct. 1847	2½ 2½	2¼ 2¾
96	Tresavean (copper), Gwennap, Cornwall	20	4680 15 to 1848	—	230	
120	Trethellan (copper), Gwennap, Cornwall	5	402 10 to 5th April	—	13	
120	Treviskey and Barrier (copper)	130	239 15 to August	9 10 to Aug.	200 205	197½ 200
1024	Wellington (copper & tin), Perranuthnoe	6½	2 2 6 ,,	0 5 to March	7	
256	West Caradon (copper), Liskeard, Cornwall	20	160 5 to June	2 10 to June	107	
512	West Providence (tin), St. Erth	10	— —	—	90	93 95
256	Wheal Basset (copper), Illogan	10½	235 0 to 3d June	10 0 to 3d June	392½	
256	Wheal Brewer (copper), Gwennap, Cornwall	2	5 0 —	—	6½	6½
256	Wheal Buller (copper), Redruth	5	96 10 to 1st Aug.	12 10 to August	550	530
126	Wheal Friendship (copper) Devon	120	2325 10 —	—	120	
5000	Wheal Golden Consols (silver-lead), Perranzabuloe	3	1 0 to July	0 5 to July	10	8
430	Wheal Lovel (lead and tin), Helston	—	4 0 to 5th April	2 0 to June	20	
112	Wheal Margaret (tin), Uny Lelant	79	179 0 to March	3 0 to May	135	
512	Wheal Mary Ann (lead), Menheniot	5½	18 5 to 21st May	3 0 to May 21	60	60
40	Wheal Owles, St. Just, Cornwall	200	— —	—	235	
240	Wheal Reeth (tin), Uny Lelant	20½	22 10 to February	2 10 to May	80	75
198	Wheal Seton (tin and copper), Camborne, Cornwall	107	190 10 to 5th April	5 0 to April	190	180
520	Wheal Trelawny (silver-lead), Liskeard, Cornwall	3½	26 10 ,,	2 0 to May	52½	50
1024	Wheal Tremayne (tin and cop.), Gwinear, Cornwall	9½	5 10 to June	0 10 to June	24½ 25	26
5000	Wicklow (copper), Wicklow	5	295 per cent. ,,	18 p. ct. end June	25½	

FOREIGN MINES.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price.
7000	Alten Mining Company (copper), Norway	14½	3 0 0 to Mar., 1848	—	2 2½	
10000	Brazilian Imperial (gold), Brazil	24½	3 17 6 to Dec., 1844	—	2¾ 3	
12000	Cobre Copper Company (copper), Cuba	40	45 12 0 to June 1851	3l. to June	35½ 35	34½ 33½ 34
10000	Copiapo Mining Company (copper), Chili	14	3 3 0 to Oct., 1850	8s. to Oct., 1850	6 6½	
20000	General Mining Association (iron & coal), Nova Scotia	20	6 10 0 to June, 1851	10s. June, 1851	12	
2700	Marmato (gold), Columbia	2½	2 0 0 to June, 1851	1l. to June, 1851	6 7	
5051	Mexican Company (silver), Mexico	59½	0 8 6 end of 1846	4s. in 1846		
7000	Royal Santiago (copper), Cuba	10	33 4 0 to July, 1846	—	3	3½
11000	St. John del Rey (gold), Brazil	15	12 17 6 to Dec., 1850	1l. 10s. to June 7		19 18¾ 19½
43174	United Mexican (silver), Mexico Av.	28½	1 12 6 to Feb. 1850	7s. 6d. to Feb., 1850	2½	2¾ 2½

Shares.	Mines.	Paid.	Last Price.	Present Price.
1024	Appledore (silver-lead and cop.) St. Ives	2½	2 2½	
940	Balnoon Consols (tin), Uny Lelant	—	4	3
5000	Bargally (lead), Cairnsmore	—	1	
3650	Bawden (silver-lead) St. Teath	⅝	½	
1508	Bell and Lanarth (copper), Gwennap	5	3½	
256	Berriow (copper), Liskeard	2½	3	
1500	Bishopstone (silver-lead), Glamorganshire	2½	10	
32	Black Burn, Alston, Cumberland	20	100	
5000	Black Craig (lead), Kirkcudbrightshire	5	5	
8000	Blaenavon (iron), South Wales	50	12	
1024	Bodmin Consols (lead), Wadebridge	6	4½	
5000	Bodmin Moor Consols (tin and copper)	1	4½	4½
1024	Bodmin Wheal Mary (copper), Bodmin	8	8	
6000	Bolenowe	2½	4	4
40	Bolowall and Nanpean (tin), St. Just	—	20	
1024	Boringdon Park (silver-lead), Plympton	1	4	
240	Boscean (tin), St. Just	12½	10	
2400	Bosorn (tin), St. Just	1	2	
1024	Bottle Hill (copper) Plympton	1	1	
256	Bridford Consols	1½	1	
2000	Bronfloyd (lead)	1	1½	1½
2400	Bryn-Arian (lead), Cardiganshire	2½	1½ 1½	1½
812	Butterdon (lead), Menheniott	3½	7	
2000	Bwlch Consols (silver-lead), Cardiganshire	4	1½	1½
1000	Cae-Gynon (silver-lead), Cardiganshire	½	4½	
4000	Calstock United (copper)	5	5	
3000	Cally (copper and lead), Kirkcudbrightsh.	1	1½	
1000	Camborne Consols (copper), Camborne	7	4	
20000	Cameron's Steam Coal (coal), Swansea	10	2 2½	
1168	Caradon Great Cons. (cop.), Linkinhorne	7	3	
1536	Caradon Vale (copper and lead), St. Ive	3½	2	
6000	Caradon Wood (lead), Linkinghorne	—	2¾	
1000	Carbona (tin and copper), Crowan	5	5	
512	Carn Galver, Morvah	1½	3	
5120	Carn Valley, St. Dennis	1	2	
3000	Carthew Consols (cop. & lead), Wadebridge	4½	6	
1056	Carvannall (copper), Gwennap	3	10	10 13
2000	Cassandra Anne (lead & cop.), Stoke Clim.	5	5	5½
200	Cefn Bruno (lead), Cardiganshire	13	54	
5000	Cefn Gwyn (silver-lead), Cardigan	1	1	
1024	Clijah and Wentworth (tin & co.), Redruth	1½	4½	2½
2000	Coed Mawr Pool (lead), Llawrnst	10	10	
2510	Cook's Kitchen (copper and tin), Illogan	15½	5½ 5	5 4½
1000	Copper Bottom (copper), Crowan	7	8	
900	Court Grange (silver-lead), Cardiganshire	10	12	
211	Craddock Moor (copper), St. Cleer	29½	9½	
1600	Craig-y-Mwyn (lead), Llanrhiadr, Mont.	8½	10½	
256	Crane and Bejawsa (copper), Camborne	20	27	
1000	Cwm Daren	1	3	3½
1000	Cwm Erfin (lead), Cardiganshire	6	3½	
2000	Cwm Sebon	—	4	
128	Cwmystwith (lead), Cardiganshire	60	100	
2000	Cyfannedd Fawr (lead), Lanegryn	½	½	
3000	Dalrhiew (copper and lead), Brecon	1½	10	
1000	Daren (silver-lead), Cardiganshire	2	7	6½
7100	Derwent (silver-lead), Durham	10	3	
5000	Devon Consols North (cop.), Lamerton	2½	2	2½
4160	Devon and Courtenay Consols (copper)	2	1½ 1½	1 1½
768	Devon Great Tincroft, North Bovey	½	6	
1000	Dhurode (copper) Ireland	2	5	
672	Ding-Dong (tin), Gulval	5	7	
4000	Dolfrwynog (copper), Merioneth	½	½	
2560	Drake Walls (tin and copper), Calstock	6½	5	6
128	Drift Moor (tin), Sancreed	1	1½	
1536	Duke of Cornwall (copper), St. Winnon	1	2	
3000	Dyfngwm (lead)	10	10	9½
1024	East Balleswidden (tin), Sancreed	2½	2	
256	East Basset (copper) Redruth	10	17	17
2500	East Birch Tor, (tin), near Ashburton	3	3	
2048	East Boringdon Park, Plympton	½	½	½
1024	East Buller (copper), near Redruth	3½	4½	
128	East Carn Brea (copper), Redruth	4	3	
1948	East Crowndale (copper), Tavistock	7½	1	½ ¾
300	East Daren (lead), Cardiganshire	13	30	
256	East Godolphin (copper), Crowan	17½	21	
4000	East Gunnis Lake Junction (copper)	½	2	
512	East Seton and Wheal Maude, Redruth	5½	4	4
9000	East Tamar Consols (sil.-lead), Beerferris	1½	18s	
256	East Tolgus (copper), Redruth	5½	7½	
1000	East Trescoll	1	3½	
256	East Tywarnhayle (copper), St. Agnes	14	5	½
500	East Wheal Ellen (tin & cop.), St. Agnes	1½	1½	
256	East Wheal Frances (copper), Illogan	6½	4	3 4
2048	East Wheal George (cop.), Walkhampton	1	10	3½ 4
2048	East Wheal Josiah (copper), Tavistock	1½	½	
512	East Wheal Leisure (copper)	9	17½	16½
1024	East Wheal Margaret (tin and copper)	1½	4½ 5	
3000	East Wheal Rashleigh, Lanreath	2s	½ ⅝	
1000	East Wheal Reeth	1½	1½	1½
4000	East Wheal Russell (copper), Tavistock	½	4 4½	
1280	Esgair Llee Llanfihangel-y-Croythin	4½	5½	
1024	Exmoor Eliza (copper), South Molton	4½	3	
6000	Forest (copper and silver-lead), Devon	1½	1	
1024	Fraidd Llwydd Mines (lead)	1½	3½	
12000	Gallt-y-Maen (silver-lead), Merioneth	2	2½ 2¾	
2560	Garras (silver-lead), near Truro	5½	2¾	
5000	Garreg (lead), Flint	—	1½	1½
1000	Gelli-rei-vin (silver-lead), Cardiganshire	1	5	
2500	Georgia Consols (tin), St. Ive's	2½	7	
256	Gonamena (copper), St. Cleer	46	12	
243	Grambler and St. Aubyn (copper)	84	34	
6500	Great Bryn Consols (copper and tin)	1	1	1
2000	Great Cowarch (silver-lead), Merioneth	2	3	
1000	Great Polgooth (tin), St. Austell	3	3	
1024	Great Sheba Consols (tin and copper)	7	6½ 7½	7 6½ 6
1024	Great Wheal Alfred, St. Erth and Phillack	4	4	
5120	Great Wheal Baddern (tin and silver-lead)	2	5	
5000	Great Wheal Martha (cop.), Stoke Clims.	—	1½	
512	Great Wheal Rough Tor Consols (copper)	29	20	
6000	Growa Slate Company, Camelford	5	5	
1026	Gustavus Mines (copper), Camborne	6½	6	5
512	Hawke's Point (copper), Uny Lelant	8½	3	
1024	Hawkmoor (cop.), Calstock, Gunnis Lake	7½	6	
6000	Heignston Down Con. (copper), Calstock	2½	3 3½	3 2¾
32	Helvellin Mining Company, Westmoreland	20	30	
1500	Hennock (silver-lead), Hennock	2¾	1½ 2	1½ 2
10000	Hibernian (copper) Ireland	12½	¾	
20000	Kenmare and West of Ireland (copper)	1	2	
1900	Keswick (lead), Portinscale, near Keswick	11	2	
3300	Kilbricken (silver-lead), Clare, Ireland	3	3 3½	
1024	Kingsett and Bedford (lead and copper)	4¾	2 1½	
786	Kirkcudbrightshire (lead), Kirkcud.	9⅝	4	
1024	La Min (Gwinear), tin and copper	3½	6½ 6½	
1742	Lamherooe Wheal Maria (copper & tin)	13	12	
5000	Lampen Consols (copper), St. Neot	1	1	
252	Lanarth Consols (copper), Gwennap	4	5	
256	Lelant Consols (tin), Uny Lelant	60	22	
13000	Llwynmalees (lead), Cardiganshire	1	1	
5056	Lydford Consols (lead)	—	1½	
6000	Marke Valley (copper), Caradon	10	3	
5000	Mendip Hills (lead), near Bristol	3½	2½	
5000	Merllyn (lead), Flint	2½	3 3½	3½ 2¾ 4
1024	Mill Pool (tin and copper), St. Hilary	2	4	
256	Mineral Court (tin), near St. Austell	25½	30	
1024	Moditonham & Marrabro' (copper & lead)	2½	2½	
2000	Molland	1	1½	
1024	Montgomery (lead and copper)	8	10	
160	Morvah Consols (tin and copper)	2	3	
320	Nansegollan (tin and copper), Camborne	7	8	
200	Nanteos (lead), Cardiganshire	34	30	
3000	Nant-y-Car (copper), near Rhayader	2	10	5
5000	New Copper Bottom (copper) Bridestowe	1½	1½	
2048	New East Crowndale (copper and tin)	1½	¾	
1024	North Buller (copper), Redruth	5	14 15	17 17½ 18
2000	North Downs (copper), Redrnth	½	1	
256	North Fowey Consols	—	12½	10
2000	North Levant (tin and copper), St. Just	1½	3	
2000	North Tamar (silver-lead & copper) Devon	2	2 2½	2
256	North Tolgus (copper), Redruth	11½	10	
256	North Trefusis (tin and copper), Redruth	1	1	
1200	North Wh. Buller, or Gt. South Tolgus	5	14	
262	North Wheal Leisure, Perranzabuloe	1½	1½	
1024	North Wh. Robert (copper), Walkhampton	2½	1½	
2048	Okel Tor (lead)	½	½	
512	Old Brimpts (tin), Lydford, Ashburton	¾	5	
256	Old Wheal Basset (copper), Redruth	1	1	
1026	Pendarves Consols (copper), Camborne	3½	6	4
1000	Pendarves and St. Aubyn (tin and copper)	5	10	
406	Penhauger	1	3	
4934	Pennant and Craigwen (lead)	3	3½	
1000	Penralt	1	3	
2048	Pentire Glaze (silver-lead), St. Minver	5½	5½	
700	Pen-y-bank and Erglodd (lead)	4½	3	3
2048	Penzance Consols (tin), Sancreed	2½	1½	
1000	Peter Tavy and Mary Tavy (copper)	3½	10	
200	Phœnix (copper and tin), Linkinghorne	—	240	
2048	Plymouth Wh Yeoland Con. (tin), Plym.	1⅝	5	
1000	Polberro (tin), St. Agnes	15	15	
2000	Polgear (copper and tin)	1	3	
1024	Praed Consols (tin), Towednack	1½	1¼ 1s	
1024	Prince Albert (tin), Perranzabuloe	1	1	
2500	Rhoswydol and Bacheiddon (lead)	10½	6	
10000	Rhymney Iron (iron), Rhymney	50	12	
10000	Ditto New	7	3	
1948	Rix Hill (tin), Tavistock	1	1	
5000	Rocks and Treverbyn (tin), St. Austell	4½	4½	
2048	Runnaford Coombe (tin)	3	½	
1024	Sidney Godolphin (copper), Breage	3½	3¾	2
10000	Silver Valley & Wh. Brothers (silv.-lead)	1	1½	
2048	Snowdon (copper), Carnarvonshire	3	3	
2000	South of Scotland	1½	1	
2000	South Carn Brea (copper), Illogan	10	8	
256	South Friendship Wh. Ann (copper & tin)	30	28	
1024	South Plain Wood (copper), Ashburton	4½	6	
300	South Speed (copper and tin), Uny Lelant	15	30	
9000	South Tamar (silver-lead), Beer Ferris	1½	2½ 2¾	2½ 2¾ 2½
256	South Trelawny (lead), near Liskeard	33½	4	
2000	South Wales Mining Company (lead)	1⅝	2½	
256	South Wheal Josiah (copper), Calstock	2	2	
280	Spearne Moor (copper), St. Just	30	40	
1024	St. Aubyn and Grylls (copper and tin)	3	4½	
12000	St. Enoder (copper and lead) St. Enoder	1	1½	
999	St. Minver Consols (silver-lead)	1	4	
687	Tavy Consols (copper), near Tavistock	8½	1½	2
5000	Temple Consols (tin & copper) Cornwall	2	5	
128	Tokenbury (copper), St. Ive, Liskeard	9½	12	
1200	Tolcarne (tin and copper), Camborne	2½	3	
1024	Trannack and Bosence, St. Erth	1	7	4 3½
1024	Trannack United Mines (tin and copper)	1½	4½ 5	
1024	Trebarvah, Perranuthnoe	1	4½	
2048	Trebell Consols (tin and copper), Lanivet	1½	2½	2 1½
600	Tregardock (lead), St. Teath	1½	5	
224	Tregorden (silver-lead) Wadebridge	15	15	
1000	Treloweth (capper), St. Erth	5	6	
600	Trelyon Consols (tin), St. Ive's	4½	5 6	
1024	Tremar (copper), Liskeard	1½	¾ ⅞	
2000	Trenance (copper), Helston	6	5	
6000	Trenault (lime quarries)	21s	21s	
512	Trethevy (copper), St. Cleer	10½	7½ 8	
512	Treville (lead), Lewanick	2¾	6½	
604	Trowan Consols (tin), Towedneck	7	10	
100	Trumpet Consols (tin), near Helston	95	100	
1000	Tyllwyd (lead), Cardiganshire	2	2½	
4000	Tyn-y-Worglod (slate), near Carnarvon	4	4	
500	Tywarnhayle (cop.), Illogan & St. Agnes	60	27½	22½
512	Tywardreath (copper), St. Blazey	2	12½	
1024	United Mines (copper and tin), Tavistock	11	10	
200	United Mines (copper), Gwennap	300	87½	75
5000	Warleggan Consols (copper)	½	⅝ ¾	
1024	West Alfred Consols	8½	16½	13
5000	West Basset (copper), Illogan	½	6	
1024	West Beam (tin), St. Austell	24s 6d	2½	
256	West Damsel (copper), Gwennap	5½	55 57½	
1024	West Ding-Dong (tin)	1	3½	
512	West Fowey Con. (tin & cop.), St. Blazey	40	60	
2048	West Goginan (silver-lead), Cardiganshire	1⅝	3	
1024	West Par Consols (copper), St. Blazey	10	11	
1024	West Phœnix, Linkinghorne	5	5	
6500	West Polgooth (tin), St. Ewe & St. Mewan	1	½	¾ 1
200	West Seton (copper), Camborne	67	115	
256	West Sharp Tor (copper) Linkinghorne	22	49	
940	West Tolgus (copper), Illogan	14½	4½	
120	West Trethellan (copper), Gwennap	15	20	
5000	West Wheal Alfred	1⅝	1½	
512	West Wheal Frances (copper), Illogan	8	14	
4000	West Wheal Friendship (copper)	1½	1	
3715	West Wheal Jewel (tin and copper)	12	1½	1½ 1¾
3715	Ditto preference	½	½	
2048	West Wheal Rose	2	2	
4000	West Wheal Russell, Tavistock	½	⅞ 1	¾
1024	West Wheal Sheba	10s	1	1½
500	West Wheal Towan (copper), Illogan	15	14	
1024	West Wheal Treasury (copper), Gwinear	8	5	
1024	West Wheal Virgin (tin), Sancreed	2	1½	
1024	Weston (lead), Cherbury, Shropshire	1½	¾	
1070	Wheal Adams (lead), Christow, Exeter	13⅝	16	
1000	Wheal Agar (copper), Illogan	6	5	
300	Wheal Arthur (lead), near East Wh. Rose	17	49	
1228	Wheal Arthur (silver-lead & cop.), Calstock	1⅝	3	
3072	Wheal Augusta (tin), St. Just	1	1⅞	
240	Wheal Bal (tin), St. Just	5½	16	
2500	Wheal Caradon (copper), St. Cleer	2	2	
256	Wheal Carpenter (tin), Gwinear	1½	5	
1024	Wh. Carpenter (lead & cop.) S. Sydenham	2	3	
124	Wh. Castle and Boswedden (tin & copper)	5	20	
1024	Wheal Catherine (silver-lead), Liskeard	2½	2½	
1024	Wheal Crebor (copper), Tavistock	3	4½	4½ 5
1024	Wheal Cupid (copper), Gwennap	1	2	2½
3000	Wheal Dora (tin and copper), St. Cleer	3⅝	6½	6
4096	Wheal Edward (copper), Calstock	¼	1½ 1¾	
182	Wheal Elizabeth (copper), Redruth	23	5	5
1024	Wheal Emily (antimony and lead)	3	5	
182	Wheal Ennis (lead), St. Erme	17	20	
1070	Wheal Enys (tin), Wendron	1⅝	1⅝	
5000	Wheal Fanny (lead)	—	3	
916	Wheal Fortescue (copper), Tavistock	5½	1½	
764	Wheal Franco (copper), near Tavistock	14½	11	
100	Wheal Friendly (tin), St. Agnes	70	31	
1536	Wheal Gill (cop. and lead), Liskeard	3	3½ 4	
2048	Wheal Hamlyn, near Oakhampton	1	1	
2560	Wheal Harriet (copper), Camborne	1	½ ¾	½ ¾
2048	Wheal Harris (lead), near Tavistock	⅝	1	
216	Wheal Henry (copper), Kea, near Truro	25	8	
6000	Wheal Langford (copper and silver-lead)	½	2	1½
1000	Wheal Lemon, Germoe	13s	⅞	
1024	Wheal May (silver-lead and copper)	2¾	3	
1024	Wheal Mary Ann (copper), Bridestow	—	2	
1024	Wheal Mary Emma, Tavistock	1½	2½	
1024	Wheal Neptune (copper), Perranuthnoe	2	3	
1080	Wheal Oak, near Helston	1½	1½	
3000	Wheal Penhale (lead and copper)	2⅞	4½	
128	Wheal Plenty (copper), Redruth	29	38	
128	Wheal Pollard (copper), St. Cleer	15⅝	10	
5000	Wheal Providence, South Sydenham	½	3	
256	Wheal Prudence (copper), St. Agnes	2⅝	4	
2048	Wheal Robins	½	1½	
4000	Wheal Russell (copper), Tavistock	1½	1½	
5000	Wheal Ruth (tin), Shepstor	2	2	
512	Wheal Sophia (silver-lead), Lezant	7	7	
1024	Wheal Speedwell (copper and tin)	2	2	
1024	Wheal Squire (copper), St. Erth	1½	1½	
256	Wheal St. Agnes (tin), St. Agnes	1½	2	
1024	Wheal Stanagwyn (copper), St. Stephen's	1	3	
1000	Wheal Susan, Breage and Crowan	1½	2	
1024	Wheal Sydney, Plympton	1½	4	
2000	Wheal Tom (tin & copper), Stoke Clims.	5	11¾	11½
1000	Wheal Treasury	1	2½	
512	Wheal Trefusis (copper), Gwennap	8½	13½	15
1024	Wheal Trelusback (copper), Stythians	5	4	5
256	Wheal Tremaine (copper), St. Ervan	11	1 1½	
3300	Wheal Trescoll (tin), Lanivet, Bodmin	3	1½	
4224	Wheal Trewane (silver-lead), St. Kew	1½	5	
267	Wheal Tryphena (tin and cop.), Redruth	40	18½	
126	Wheal Union (copper), Redruth	40	40	
6000	Wh. Unity Consols (cop. & tin), Gwinear	2	2½	
1024	Wheal Uny (tin and copper)	3	6	5½
1024	Wheal Venton (silver-lead), Liskeard	4¾	7½ 8 7½	
4000	Wheal Victoria (copper)	—	2½	
1000	Wheal Vincent (tin), Alternum	7½	7½	
512	Wheal Violet (tin and cop.), St. Stephens	1¾	3½	
256	Wheal Vlow	2	4	
4000	Wheal Williams (copper)	—	2½	
1024	Wheal Wrey (lead), St. Ive, Liskeard	2s 6d	2	
4096	Wheal Zion (copper and lead), Tavistock	1½	6¾ 7½	6½ 6 6½ 8

FOREIGN MINES.

Shares.	Mines.	Paid.	Present Price.
12000	Annotto Bay Mining Association (copper), Jamaica	1	5½ 6 5
19000	Australian (copper), South Australia	5	1 1½
3250	Kinzigthal Mining Association (silver), Germany	2½	
12000	Liguanea and General Mining Company of Jamaica	1	3
5000	Linares (lead), Spain	3	1 1½
500	Ditto Preference	3	3
4500	Ditto Additional	1	1½
20000	Mexican and South American (copper), Mexico	4½	4½
5000	National Brazilian (gold), Brazil	30	2½ 2½
104000	North British Australasian (copper), S. A. & New Zea.	1	½
10000	Worthing (copper), Adelaide, South Australia	4	2½ 2½ 3

THE RICHES OF WALES.—The riches locked up in the mountains of Wales are inexhaustible, and only require capital and enterprise for their development. We have lately copied from the *Mining Journal* several highly gratifying reports relative to the existence of copper in large quantities in the neighbourhood of Beddgelert, and the following has been forwarded to us as an eminent engineer's report on inspection of the Cwmystrellyn slate vein, on the Gorsedda estate, near the same place:—"The situation of the ground at Gorsedda is highly advantageous for working. The slate rocks rise one above another to a great height, and form a sort of amphitheatre of 'Thrones,' from which, indeed, the name of 'Gorsedda' has its origin. As the country below falls in the same proportion, there is abundant space for rubbish; and the aid of any machinery in carrying on the operations of a quarry is not here required, consequently, extensive works may be maintained at a comparatively small outlay. A site combining more natural advantages for quarrying is not generally met with. Trials at this place were made by the late Mr. Griffith, of Bron-y-Gadair, and were sufficiently extensive to establish the fact of there being an immense body of slate rock in the mountain. A considerable quantity of roofing slates appear to have been manufactured from the trial openings; but the decease of the gentleman just named, prevented the plans he had under contemplation for the permanent working of the quarries from being carried out. Three openings were made: one being at the top, another in the middle, and the last at the foot of the hill. In each of these the supply of rock is very abundant. From the lower opening a level, or adit, is driven into the mountain, which is seen to be a mass of slate rock within, as it is also without. This slate stands a very high temperature without being injured; is particularly strong, and at the same time possesses much elasticity, while an over-end pressure does not disturb the lamina. It is of a compact texture; resisting moisture. In the slate market it would be denominated 'a good metal;' and it would, therefore, be well received in London and elsewhere as roofing slates. The colour is very good. These quarries are situate about three miles from Beddgelert, and six miles from Portmadoc, which latter is an excellent shipping port for slates. At the foot of the hill there is a lake called Llyn Cwmystrellyn, which, if crossed by a sort of floating bridge to the road leading from Tremadoc to the Pen-y-caenewydd inn, the distance for carriage of slates to shipping would be very much shortened."—*North Wales Chronicle.*

HOLLOWAY'S OINTMENT AND PILLS WONDERFULLY EFFICACIOUS IN CURING SEVERAL WOUNDS IN A PERSON'S LEG.—Extract of a letter from Margaret Jones to Messrs. Russell and Watson, of Bacchus Marsh, Melbourne, Port Phillip, dated Jan. 6, 1851:—"Gentlemen: Since I applied at your store for a supply of Holloway's Ointment and Pills, I have made a sound cure of my leg, after having suffered from several wounds in it for more than two years. I tried previously many doctors in the country without obtaining any relief whatever from their remedies, but by using Holloway's invaluable medicines for a few weeks, every wound is healed, and my leg is now perfectly sound." Sold by all druggist, and at Professor Holloway's establishment, 244, Strand, London.

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